

An annotated checklist of the bees of Washington state

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Abstract

Bees (Hymenoptera: Apoidea) are vital components of global ecosystems, yet knowledge of their distribution is limited in many regions. Washington state is located in an ecologically diverse part of North America and encompasses habitat types and plant communities known for high bee species richness. To establish a baseline for future studies on bee communities in the state, we used published and unpublished datasets to develop a preliminary annotated checklist of bees occurring in Washington state. We document, with high confidence, 565 species of bees in Washington and identify an additional 102 species likely to occur in the state. We anticipate future research survey efforts, such as the newly initiated Washington Bee Atlas, will discover several species that have the potential to occur in Washington and provide new data for 84 species which have not been recorded in more than 50 years.

Keywords

Anthophila, Apoidea, faunal list, new state records, Pacific Northwest, pollinators

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Introduction

Despite the global importance of bees and the risk of disrupting vital ecosystem services due to pollinator decline, our basic knowledge of many bee species is still limited (Brown and Paxton 2009; Winfree et al. 2011). Documenting regional bee faunas is essential for monitoring ecosystem health by providing a baseline for understanding changes in species composition at local and regional scales (Winfree et al. 2011; Mathiasson and Rehan 2019; Decker et al. 2020; Kilpatrick et al. 2020). Efforts to fill this gap have resulted in a push to document the bee fauna across the United States, with recent checklists and other biogeographic summaries published for Colorado (Scott et al. 2011), Indiana (Jean 2010), Illinois (Decker et al. 2020), Louisiana (Owens et al. 2018), Maine (Dibble et al. 2017), Massachusetts (Veit et al. 2021), Michigan (Gibbs et al. 2017), Minnesota (Portman et al. 2023), Oregon (Best et al. 2021, 2022), Pennsylvania (Kilpatrick et al. 2020), and Wisconsin (Wolf and Ascher 2009).

Washington state is located in the North American Pacific Northwest, an ecologically diverse region that encompasses wet, coastal forests, geologically active mountains, arid, interior forests, and extensive shrub-steppe plant communities (Franklin and Dyrness 1973). Increased population growth throughout the Puget Sound in the western part of state (Robinson et al. 2005; Zank et al. 2016) and widespread agriculture usage in the eastern part of the state has converted many native ecological communities to heavily modified anthropogenic landscapes (Daubenmire 1970). In fact, Daubenmire’s (1970) efforts to characterize the pre-European vegetation of Washington’s shrub-steppe communities found that most of eastern Washington had already been either heavily grazed by livestock or was already in cultivation after less than 100 years of colonization. The prominence of agriculture in eastern Washington is particularly of concern given that temperate grassland ecosystems are among the most threatened in the world (Lane et al. 2022) and xeric regions such as those east of the Cascade Mountain Range are associated with high bee diversity (Michener 1979; Cane 2011; Orr et al. 2021). For example, the Palouse Prairie in southeastern Washington state and adjacent Idaho is a critically endangered ecosystem, with native plant communities possibly occupying as little 1% of their historic range (Black et al. 1998; Looney and Eigenbrode 2012). Even so, Palouse prairie remnants have been shown to support many rare or endangered species such as ferruginous hawk, white-tailed jackrabbit, and sharp-tailed grouse despite high fragmentation and overall habitat loss (Black et al. 1998; Hanson et al. 2008; Looney and Eigenbrode 2012). Meanwhile, the central xeric regions are historically under-sampled and poorly known compared to the Puget Sound and the Palouse Prairie, despite expecting high bee diversity in such habitats.

It is therefore critical to establish a baseline of the species present to assess current regional species richness to inform future state-level conservation planning.

The objective of this checklist is to document the species currently encountered in Washington state, but it is interesting to note that the presence of bees in Washington has also been documented in the fossil record. A fossil of *Bombus proavus* was discovered during 1927–1928 in the Latah Formation (11.63 Ma to 5.333 Ma) near Spokane in Spokane County (Cockerell 1931), and plant fossils showing possible leaf cutter bee damage were discovered near Republic in Ferry County in the Klondike Mountain Formation (15.97 Ma to 11.63 Ma) (Lewis 1994). Several studies have been made of the bee fauna in parts of Washington, which collectively contribute to a baseline of species presence in the state, but there has yet been no synthesis of these records, or a checklist developed for the state. Contemporary lists perhaps begin with Viereck et al. (1904a; 1904b; 1904c; 1905; 1906) who summarized the known bee species of the Pacific Northwest in a series of five publications, including Washington, Oregon, and British Columbia. This established the first baseline of bee diversity in the region and reported 157 species at the time (although after accounting for synonymies this number drops to 116 species). The next comprehensive bee survey in Washington was not until Tepedino and Griswold (1995) published a technical report on the bees of the Columbia Basin, including parts of Washington, Oregon, and Idaho. They reported 647 species in the Columbia Basin, but emphasize that the area was under-sampled and estimate the actual number of species to be closer to 1000. Mayer et al. (2000) reported 72 species in a small area near the Snake River in southeastern Washington, although this did not include any *Lasioglossum* identified to species. Wilson et al. (2010) surveyed bees in the Tonasket Ranger District of Okanogan-Wenatchee National Forest (in north-central Washington), reporting 140 species. Hatten et al. (2013) published a list of the *Bombus* of the Palouse Prairie (including parts of Washington and Idaho) based on bycatch from pitfall traps and identifying ten species. Subsequent work by Rhoades et al. (2017) in the same areas resulted in a more comprehensive sample of the Palouse bee taxa, reporting 174 identified species and 36 undetermined morphospecies, 57 of which were new to the Palouse.

To obtain a baseline bee fauna of Washington state, data from these disparate studies and other literature records must first be compiled. Examination of museum specimens and collection of fresh material is also needed, especially in areas that are not previously well-studied. The objective of this checklist is to provide such a baseline for the state of Washington for use by the public, policymakers, and researchers to guide future research and conservation plans.

Materials and methods

The checklist was compiled using online biodiversity database portals [Global Biodiversity Information Facility (GBIF; gbif.org) and Discover Life Global Mapper (discoverlife.org; Ascher and Pickering 2022)], specimens in private and institutional

collections, and literature review. GBIF records were searched by selecting a coordinate polygon to include only Washington records (GBIF 2022a). Because not all Washington records have explicit geocoordinates associated with them, a second search was conducted using Washington as the state location (GBIF 2022b). Online records accessed by GBIF and Discover Life Global Mapper were obtained from various museum collections and the Barcode of Life Data System (BOLD; boldsystems.org; Ratnasingham and Hebert 2007) as well as citizen or community science records from citizen or community science portals iNaturalist, Bumble Bee Watch, and BugGuide. Table 1 presents a list of all private or institutional collections used to compile this checklist, accessed through GBIF, the Discover Life Global Mapper, or personal communications.

Data quality of records accessed through online biodiversity database portals such as GBIF and Discover Life Global Mapper can be inconsistent (Goodwin et al. 2015; Gibbs et al. 2017). Similarly, it is important to evaluate the accuracy of data collected from community science programs such as Bumble Bee Watch and BugGuide to determine their appropriate use (MacPhail et al. 2020). To ensure that this checklist is reasonably accurate, records were filtered to only include records from collections currently or previously managed by known bee experts, and community science submissions that were confirmed by known bee experts. Nonetheless, this contribution must be regarded as a preliminary checklist, as we were not able to verify every single record, and several entries warrant reassessment.

Literature sources were reviewed for any bees recorded from Washington. Not all such records include collection dates or locality data. Where possible, some of this information was inferred from the methods section. Records without county were georeferenced using the USGS Domestic Names Database (<https://edits.nationalmap.gov/apps/gaz-domestic/public/search/names>). If the location could not be found by searching in the USGS domestic names database, we used other historical documents (e.g. antique maps) to identify the location in the state and then manually locate it on a map.

Species names are updated to match current taxonomy. Taxonomy generally follows the Integrated Taxonomic Information System (itis.gov) and Michener (2007), with the following exceptions: the higher-level classification of Apidae follows Bossert et al. (2019; 2020); the generic classification of Eucerini follows Freitas et al. (2023); the taxonomy for *Bombus* follows Williams (1998; and the regularly updated website *Bombus*: bumblebees of the world), Williams et al. (2014), Williams et al. (2015), Martinet et al. (2019), Ghisbain et al. (2020), and Lhomme et al. (2021); *Epeolus* follows Onuferko (2017); *Nomada* follows Droege et al. (2010), and *Brachymelecta* follows Onuferko et al. (2021). The *Andrena* subgenera classification follows Pisanty et al. (2022).

We based much of the structure and format of this list on the updated checklist of Pennsylvanian bees (Kilpatrick et al. 2020). The Washington checklist is organized alphabetically by family with each subsequent level (i.e., subfamily, tribe, genus, subgenus, and species) also organized alphabetically. Records for each species include, if available, the county where it was recorded, each month it was recorded as well as the most recent year it was recorded (in parentheses), the collection where specimens can be found, conservation status, and any floral and host associations noted in the literature and specific to Washington.

Table 1. List of collections and databases holding species records.

AMNH	American Museum of Natural History, New York, NY
BugGuide	BugGuide (bugguide.net)
OSUC	C. A. Triplehorn Insect Collection, Ohio State University, Columbus, OH
CAS	California Academy of Sciences, San Francisco, CA
CSCA	California State Collection of Arthropods, California Department of Food and Agriculture, Sacramento, CA
CMNH	Cleveland Museum of Natural History, Cleveland, OH
CNC	Canadian National Collection of Insects, Arachnids, and Nematodes, Agriculture Canada, Ottawa, Ontario, Canada
CUIC	Cornell University Insect Collection, Ithaca, NY
FMNH	Field Museum of Natural History, Chicago, IL
PSUC	Frost Entomological Museum, Penn State University, State College, PA
NMDG	Nate Green's Private Collection
INHS	Illinois Natural History Survey, University of Illinois, Champaign, IL
iNaturalist	iNaturalist (inaturalist.org)
JRYA	Jessica Rykken's Database
LACM	Los Angeles County Museum, Los Angeles, CA
Miliczky	Miliczky's Private Collection
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, MA
TTU	Museum of Texas Tech University, Lubbock, TX
UMNH	Natural History Museum of Utah, Salt Lake City, UT
NMNH	National Museum of Natural History, Smithsonian Institution, Washington, D.C. (formerly USNM, United States National Museum)
NMSU	New Mexico State Collection of Arthropods, Las Cruces, NM
NYSM	New York State Museum, Albany, NY
NCSU	North Carolina State University Insect Museum, Raleigh, NC
PCYU	Packer Collection, York University, Toronto, Ontario, Canada
PWRC	Patuxent Wildlife Research Center, US Geological Survey, Laurel, MD
ANSP	Philadelphia Academy of Natural Sciences, Philadelphia, PA
BBSL	Pollinating Insect – Biology, Management, Systematics Research Unit, Logan, UT
RSKM	Royal Saskatchewan Museum, Regina, Saskatchewan, Canada
RUAC	Rutgers University Entomological Museum, New Brunswick, NJ
TAMU	Texas A&M University Insect Collection, College Station, TX
Hanson	Thor Hanson's Private Collection
UCDC	University of California, Bohart Museum of Entomology, Davis, CA
EMEC	University of California, Essig Museum of Entomology, Berkeley, CA
UCRC	University of California, Riverside, CA
UCMC	University of Colorado Museum of Natural History, Boulder, CO
UCMS	University of Connecticut Insect Collection, Storrs, CT
SEMC	University of Kansas, Snow Entomological Museum Collection, Lawrence, KS
UNSM	University of Nebraska-Lincoln State Museum, Morrill Hall, Lincoln, NE
UNHC	University of New Hampshire Collection of Insects and Arthropods, Durham, NH
UNM	University of New Mexico, Museum of Southwestern Biology, Division of Arthropods, Albuquerque, NM
FWSE	U.S. Fish and Wildlife Service, Vancouver, WA
WFBM	University of Idaho, W. F. Barr Entomological Collection, Moscow, ID
WSDA	Washington State Department of Agriculture, Tumwater, WA
WSUC	Washington State University, M. T. James Entomological Collection, Pullman, WA
WWUC	Western Washington University Insect Collection, Bellingham, WA
BOMBUS	Xerces Society – Bumble Bee Watch
PMNH	Yale University, Peabody Museum of Natural History, New Haven, CT

Records of subspecies are kept in the checklist as they were identified, but were only considered at the species level for purposes of calculating species richness. In some cases, the same records appear in multiple databases or literature sources (e.g. the same specimens may be referred to in a revision and again in a subsequent summary). Since this list is not quantitative at the species level, we did not attempt to address the “first” appearance per se or otherwise parse these duplicative instances, instead opting to report each dataset. Records that were not previously published in a peer-reviewed journal are treated as new state records and/or county records. A denotation of state record does not mean that we discovered the species through our own efforts, but rather that we highlight a digital record or database entry that we deem reliable, or that we present newly digitized information from the Washington State University M. T. James Entomological Collection (WSUC). Newly reported state records are denoted by a dagger symbol (†). Counties are listed in bold to denote new county records. We considered any species with a likely native range that does not include Washington state (e.g. species from Europe or known only from the eastern United States) to be introduced and denote them with an asterisk (*).

When available conservation status was assessed using the International Union for Conservation of Nature (IUCN), NatureServe, and the Xerces Society Red List of Pollinating Insects of North America. Species categorized as critically endangered may have an extremely high risk of extinction, while species categorized as vulnerable may have a high risk of extinction. Species categorized as least concern do not meet the criteria for other categories and are generally not the target of conservation action. Species missing data critical for the determination of its conservation status are categorized as data deficient. A more detailed description of the criteria determining each category can be found in IUCN Red List Categories and Criteria: Version 3.1 (IUCN 2001). NatureServe assesses and assigns ranks for species and ecosystems at the global (G1 – G5) and state levels (S1 – S5) (NatureServe 2024). Ranks range from critically endangered (G1 and S1) to secure (G5 and S5). A more detailed description of how NatureServe assigns conservation status can be found at <https://www.natureserve.org/conservation-status-assessment> (NatureServe 2024).

Some records were for species far outside of their known and expected range, with no known specimens or other information available to verify their accuracy. While these data contribute to an accurate account of species *recorded* in Washington, they could represent identification or labelling errors and seem less likely to occur in the state. Because this list may be used to inform conservation and research decisions, we placed such questionable records in a separate section to ensure that they are readily identifiable as unverified and caution readers to consider them in this context.

Expected species were determined from reviewing published species distribution maps that included Washington. Species with an expected distribution in Washington but no known records were highlighted as likely to occur in Washington. Additionally, species occurring near Washington in Oregon, Idaho, and/or British Columbia in habitats similar to those within Washington or with host plants occurring within Washington were also considered to likely occur in Washington. By these criteria, at least 120 additional species of bees are likely to occur in Washington. However, many specimens in museum collections await identification or formal description (Orr et

al. 2021) and thus some of these species may already have been collected in the state. Currently undescribed species would add to this total expected species.

Additionally, an interactive map with county-level data and the option to map bee records by family is available online (https://phylosolving.shinyapps.io/WA_bee_catalog/) as a shiny app (Chang et al. 2024), which was created using leaflet (Cheng et al. 2024) in R (R Core Team 2023). The dataset is associated with this paper and is not intended to be updated; instead, these data and new records generated by the Washington Bee Atlas or other research will be migrated to a “living” interface that is currently being developed.

Results and discussion

Using these data, we record 565 described species of bees in Washington State, representing 44 genera from all 6 families of bees known from North America (Table 2). The remaining bee family, Stenotritidae, is known only from Australia. We found records or data for 603 potential bee species in Washington state but removed 38 questionable records. *Andrena*, with 109 species, had the highest species richness of any genus in Washington state, comprising 20% of the total species. This is not surprising, as *Andrena* is known to be species rich in temperate bee communities of North America (e.g., Kilpatrick et al. 2020; Rhoades et al. 2018). As an example, 12% of the observed species in a survey of just montane areas of north-central Washington were *Andrena* (Wilson et al. 2010; Rhoades et al. 2018).

Ground nesting species frequently outnumber other bee groups in regional bee faunas (Cane 2008), and Washington’s fauna is no exception (Fig. 1; see Suppl. material 1 for all the life history data for each species). Most Washington bees with known or presumed ecological data are ground nesting (254 species), followed by cavity nesting species (180 species). Some *Megachile* species are known to nest in cavities in the ground as well as excavate nests in the ground (Michener 2007). The literature is not always clear on this point, and some of these species may actually be cavity nesting instead of ground nesting and vice versa. Washington’s bee fauna is primarily solitary (380 species) as are most species globally (Danforth et al. 2019), followed by cleptoparasites (90 species), social species (33 species), and social parasites (4 species). Floral preference is unknown for many of Washington’s bees. However, for those with known floral preference data, Washington’s bee fauna appears to be more polylectic (163 species) than oligolectic (110 species). Notable among the solitary ground nesting species found in Washington is the alkali bee, *Nomia melanderi* Cockerell, which is of considerable agricultural importance as an alfalfa pollinator (Cane 2008). Known for being the only managed solitary ground-nesting species of bee in the world, large aggregations of *N. melanderi* can be found in Walla Walla County where nesting beds consisting of moist silty and periodically salted soils have been maintained and protected for decades (Cane 2008; Kapheim et al. 2021; Cane 2024), including reduced local speed limits to minimize mortality (Vinchesi 2014). Other notable native Washington solitary bees include the mason bees *Osmia aglaia* Sandhouse, *O. atriventris* Cresson, and *O. lignaria* Say, all of which are important raspberry pollinators (Drummond and Stubbs 1997; Andrikopoulos and Cane 2018).

Table 2. Bee species recorded from Washington state, not including questionable records. The number of introduced species is indicated in parentheses.

Andrenidae	<i>Andrena</i>	109 (1)	Halictidae	<i>Agapostemon</i>	3
	<i>Calliopsis</i>	4		<i>Dufourea</i>	5
	<i>Panurginus</i>	3		<i>Halictus</i>	6
	<i>Perdita</i>	9		<i>Lasioglossum</i>	63 (4)
	Total	124 (1)		<i>Nomia</i>	1
Apidae			Megachilidae	<i>Sphecodes</i>	8
	<i>Anthophora</i>	15		Total	84 (4)
	<i>Apis</i>	1 (1)		<i>Anthidiellum</i>	2
	<i>Bombus</i>	25 (1)		<i>Anthidium</i>	11 (2)
	<i>Brachymelecta</i>	1		<i>Ashmeadiella</i>	8
	<i>Ceratina</i>	5		<i>Atoposmia</i>	2
	<i>Diadasia</i>	6		<i>Chelostoma</i>	2
	<i>Epeolus</i>	6		<i>Coelioxys</i>	8
	<i>Epimelissodes</i>	1		<i>Dianthidium</i>	7
	<i>Eucera</i>	10		<i>Dioxys</i>	4
	<i>Habropoda</i>	4		<i>Heriades</i>	4
	<i>Melecta</i>	3		<i>Hoplitis</i>	12
	<i>Melissodes</i>	23		<i>Megachile</i>	31 (3)
	<i>Nomada</i>	35		<i>Osmia</i>	70 (2)
	<i>Oreopasites</i>	1		<i>Protosmia</i>	1
	<i>Triepeolus</i>	8		<i>Stelis</i>	15
	<i>Xylocopa</i>	1(1)		Total	177 (7)
	<i>Zacosmia</i>	1			
	Total	150 (3)			
Colletidae	<i>Colletes</i>	14	Melittidae	<i>Macropis</i>	1
	<i>Hylaeus</i>	16 (2)		Total	1
	Total	30 (2)			

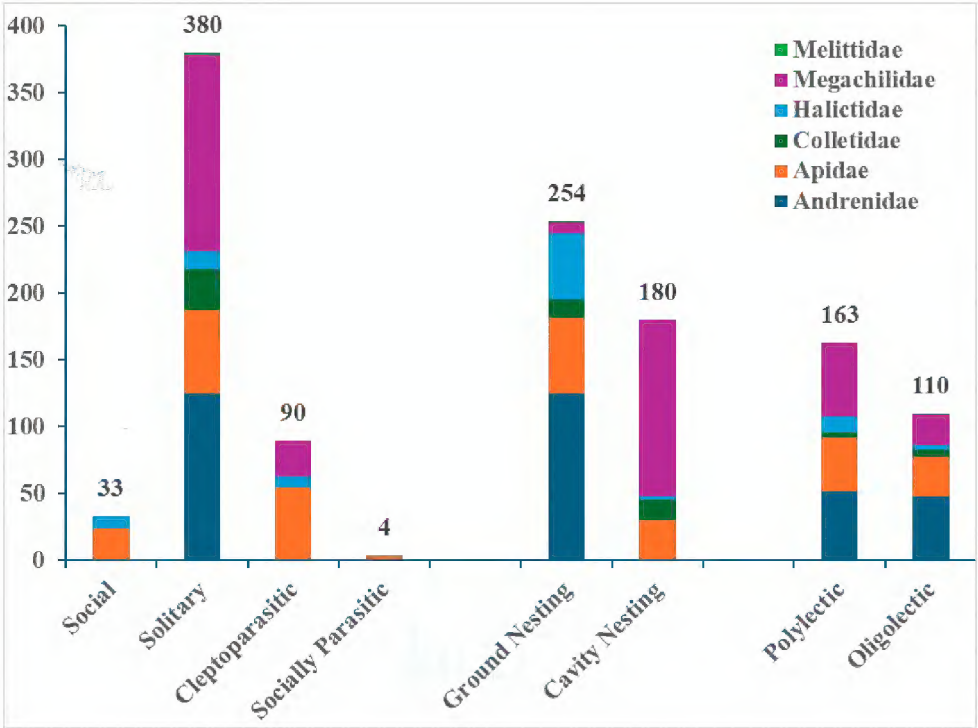


Figure 1. Total number of Washington bees with known ecological data by lifestyle, nesting preference, and floral preference.

The peak of bee activity in Washington statewide is between April and September with Megachilidae being the most species rich during this period (Fig. 2a). However, some species of Andrenidae, Apidae, and Megachilidae are active throughout the year. When comparing the seasonality geographically, Andrenidae has a higher peak in the spring on the west side of the Cascades indicating that the west side has more species of spring flying Andrenidae than the east side (Fig. 2b, c). Also, the Apidae peak earlier in the season on the west side than the east side. Different bee taxa vary in their seasonality (Oglivie and Forrest 2017). *Andrena*, except the subgenera *Callandrena* and *Cnemidandrena*, are mostly early spring species (LaBerge 1986b; Larkin et al. 2008; Oglivie and Forrest 2017). Most *Osmia* (Megachilidae) are also spring species; in contrast, *Megachile* spp. tend to be more active in the late summer (Oglivie and Forrest 2017).

Most of Washington is under sampled for bees (Figs 3, 4). The number of species by county almost certainly reflects which parts of the state have been more heavily sampled than others, rather than the actual species richness of that county (Fig. 5). Counties with more than 100 documented species (e.g., Benton, Chelan, King, Kittitas, Klickitat, Okanogan, Pierce, Spokane, Thurston, Walla Walla, Whitman, and Yakima Counties) are also home to Washington's largest cities and/or popular recreational areas and are more likely to have documented citizen or community scientist records. In addition, some of these same counties (e.g., Okanogan and Whitman Counties) were locations of research projects targeting bee biodiversity.

Washington is an ecologically diverse state, with the Cascade Mountains separating the western coastal forests from the arid interior forests and shrub-steppe to the east (Franklin and Dyrness 1973). According to EPA's Level III and IV Ecoregions of Washington map, the state has nine Level III ecoregions and 57 Level IV ecoregions (US Environmental Protection Agency 2012). The Columbia Plateau, located east of the Cascade Mountains, has the highest richness of bee species (Table 3; see Suppl. material 2 for species by ecoregion). Additionally, nine of the 44 genera in this dataset have been recorded from only east of the Cascade Mountains (Fig. 6), although some of these will likely be detected in western Washington in future surveys. Even so, we expect that some genera are indeed restricted to eastern Washington. For example, *Zacosmia* is a genus of cleptoparasites whose hosts (*Anthophora* (*Micranthophora*)) are associated with xeric or semi-xeric habitats (Michener 2007; Orr et al. 2018). No genus was recorded from only the west side of the state in the records we reviewed. Orr et al. (2021) found bee species richness was greatest in regions characterized by high solar insolation, high average potential evapotranspiration, low precipitation during the driest month, and decreased seasonal variation. Additionally, tree presence negatively impacted bee richness (Orr et al. 2021). As the Columbia Plateau meets these conditions, it is unsurprising that there is more species richness as well as more unique species in this ecoregion compared to the ecoregions west of the Cascade Mountains, where there are more trees and precipitation.

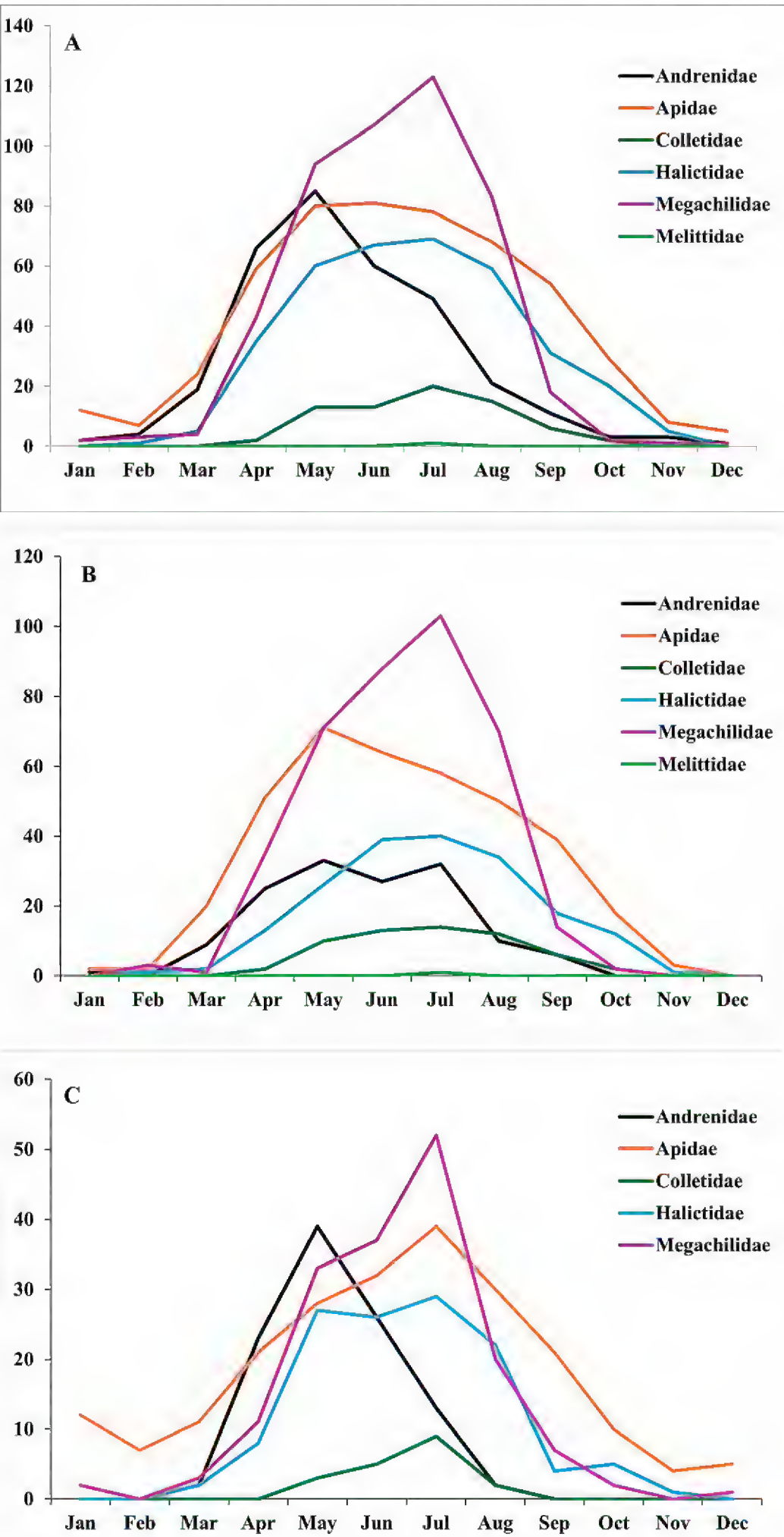


Figure 2. Seasonality of Washington bee species by family for **A** Washington state **B** east of the Cascade Mountains, and **C** west of the Cascade Mountains, based on collection or observation dates from records reviewed for this checklist.

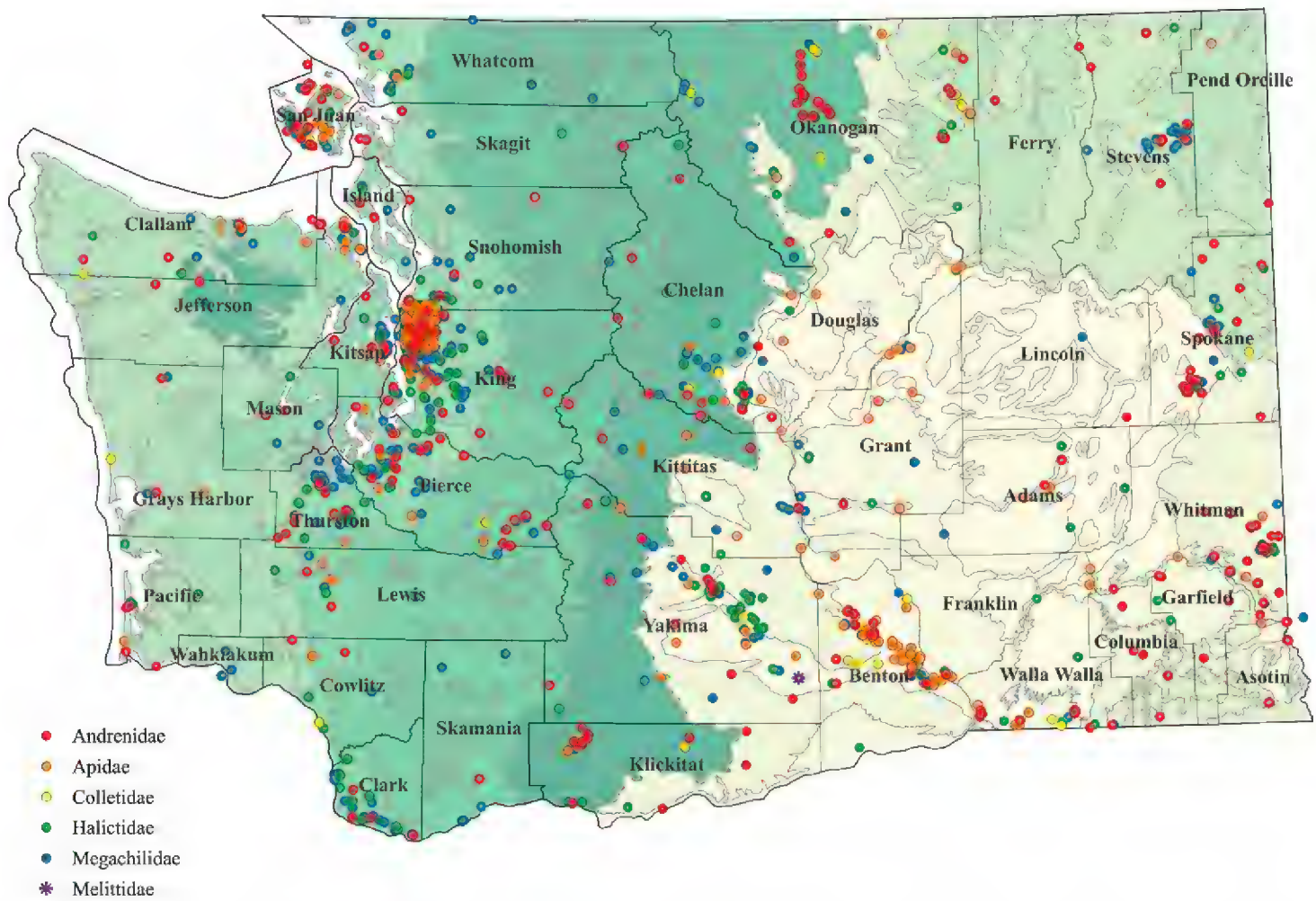


Figure 3. Map of the records for all families, excluding *Apis mellifera* and *Bombus* spp. This map was built in QGIS using a Level IV Shapefile from EPA as a basemap.

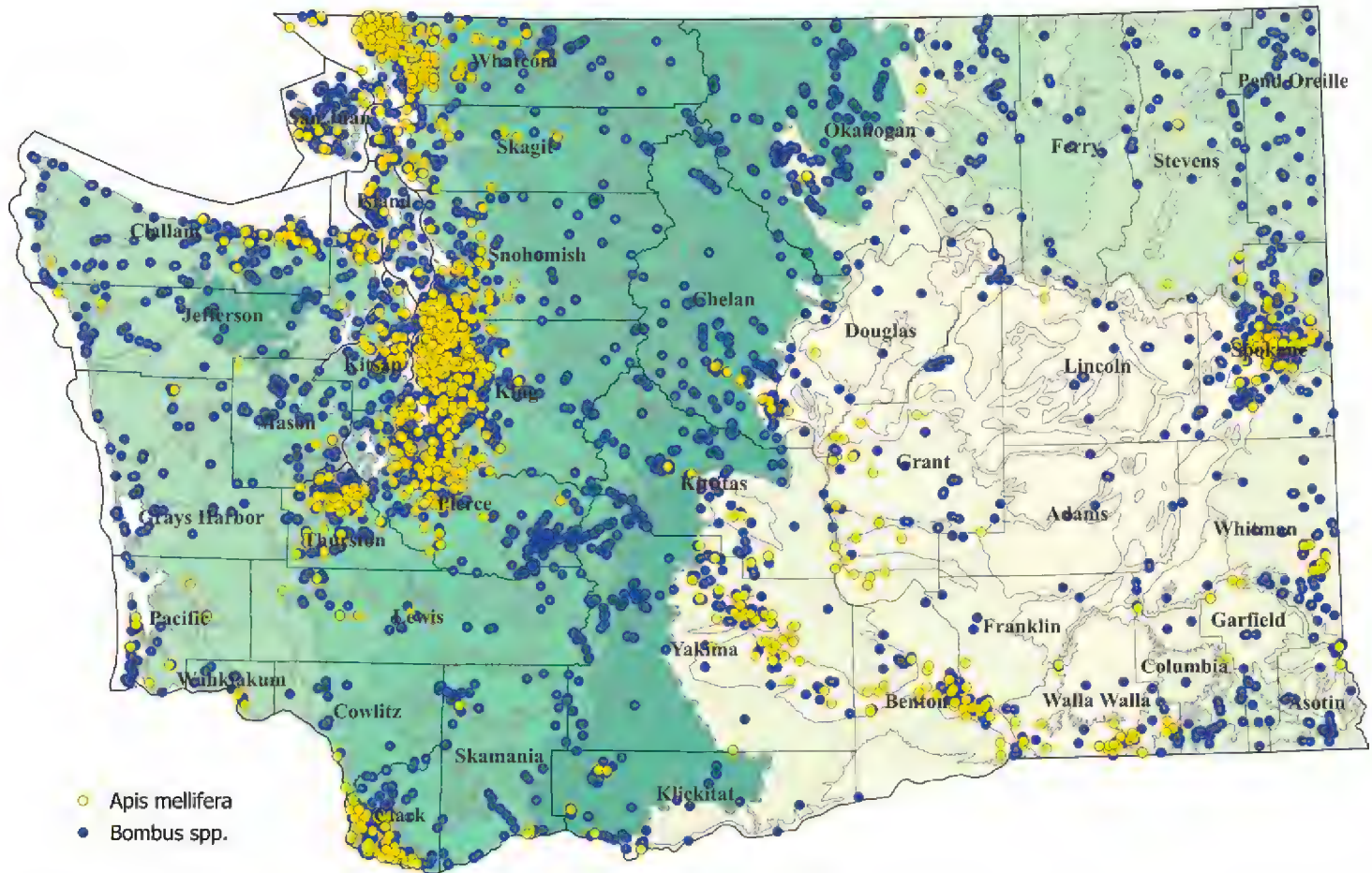


Figure 4. Map of the records for *Apis mellifera* and *Bombus* spp. This map was built in QGIS using a Level IV Shapefile from EPA as a basemap.



Figure 5. Bee species richness for each of the 39 counties of Washington. Whitman county in eastern Washington has the most recorded species (288), while Wahkiakum in western Washington has the least (16). This interactive map with additional county-level data and the option to filter records by family is available at: https://phylosolving.shinyapps.io/WA_bee_catalog/. This map was built in Leaflet (<http://agafonkin.com/en/>) using tiles from USGS.

Table 3. The number of bee species recorded in each EPA Level III Ecoregion.

EPA Level III Ecoregion	Number of Species
Blue Mountains	32
Cascades	74
Coast Range	66
Columbia Plateau	399
Eastern Cascades Slopes and Foothills	157
North Cascades	160
Northern Rockies	139
Puget Lowlands	213
Willamette Valley	35

Eighty-four species (15%) on this list have not been documented in the state since before 1970, with more than 80% of these from eastern Washington. More than a quarter of these species are cleptoparasites. In fact, nearly half of the recorded species of the cleptoparasitic genus *Nomada* haven’t been reported in decades. Of the 84 species not documented in over 50 years, 16 are only known from their type specimens, 10 of which are cleptoparasites. Notable among these 16 species is the *Lysimachia* (loosestrife) specialist *Macropis steironematis opaca*, the single representative of Melittidae in Washington state. This species has not been sighted since 1882 when it was collected from Morgan’s Ferry along the Yakima River, despite focused survey efforts in

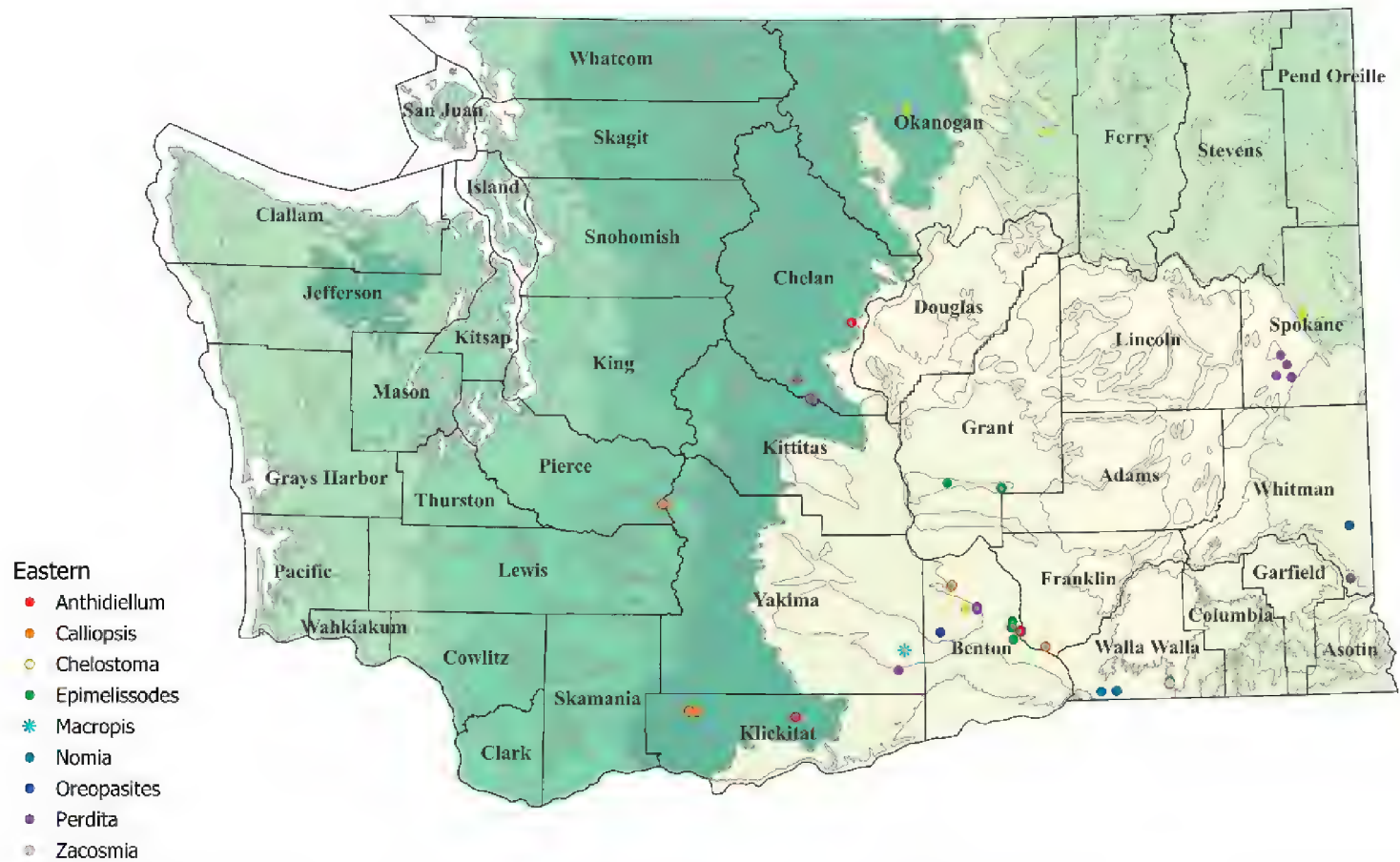


Figure 6. Map of the genera only recorded on the east side of the Cascade Mountains. This map was built in QGIS using a Level IV Shapefile from EPA as a basemap.

recent decades. *Macropis* are ecologically unusual in that they collect floral oils from *Lysimachia* spp. for nest provisioning as well as for lining nest cell walls (Cane et al. 1983; Michez and Patiny 2005; Packer 2023).

Of the 158 bee species with a federally and/or state determined conservation status, Washington has 42 bee species that have been determined to have a conservation status of vulnerable, imperiled or critically imperiled or endangered by organizations such as IUCN, the Xerces Society, and NatureServe (Table 4). Included are the following six species which have not been documented in the state in more than 50 years: *Andrena aculeata*, *Perdita similis pascoensis*, *Megachile legalis*, *Osmia lanei*, *O. nigro-barbata*, and *Macropis steironematis opaca*. Currently, the Washington Department of Fish and Wildlife State Wildlife Action Plan only identifies *Bombus morrisoni*, *B. occidentalis*, and *B. suckleyi* as species of greatest conservation need (SGCN) (Washington Department of Fish and Wildlife 2015). Future research should focus on determining the conservation needs of the remaining 39 species of possible conservation concern as well as the 407 species without conservation status determination. Nesting and floral resources are such vital components of bee survival, yet this data is lacking for so many species making it difficult to assess conservation statuses (Orr et al. 2022).

The bee fauna of Washington state is more species rich than its northern neighbor British Columbia, which has 483 documented species (Sheffield and Heron 2018). Future studies of Washington's more under-surveyed counties, such as Adams, Douglas, Franklin, Grant, and Lincoln in the Columbia Plateau as well as the 22 other counties with fewer than 100 documented species (Fig. 5), will add to this documented richness.

Table 4. Species with conservation statuses of possible conservation concern. CE = critically endangered and Vul = vulnerable (National Research Council); G2 = imperiled, G3 = vulnerable, S1 = critically imperiled, S2 = imperiled, S3 = vulnerable (NatureServe 2024).

Family	Species	CE	Vul	G2	G3	S1	S2	S3
Andrenidae	<i>Andrena aculeata</i>		X					
	<i>Perdita similis pascoensis</i>		X					
	<i>Perdita wyomingensis sculleni</i>		X					
Apidae	<i>Anthophora crotchii</i>				X			
	<i>Anthophora neglecta</i>				X			
	<i>Anthophora occidentalis</i>				X			
	<i>Bombus appositus</i>				X			
	<i>Bombus caliginosus</i>		X	X				X
	<i>Bombus fervidus</i> complex		X		X			
	<i>Bombus flavidus</i>							X
	<i>Bombus frigidus</i>						X	
	<i>Bombus insularis</i>				X			
	<i>Bombus kirbiellus</i>					X		
	<i>Bombus lapponicus sylvicola</i>							X
	<i>Bombus morrisoni</i>		X		X			
	<i>Bombus occidentalis</i>		X		X		X	
	<i>Bombus suckleyi</i>	X		X		X		
	<i>Bombus vagans</i>						X	
	<i>Bombus vandykei</i>							X
	<i>Eucera douglasiana</i>		X					
	<i>Eucera frater lata</i>		X					
	<i>Habropoda miserabilis</i>			X				
Megachilidae	<i>Anthidium banningense</i>				X			
	<i>Anthidium edwardsii</i>				X			
	<i>Hoplitis orthognatha</i>		X					
	<i>Hoplitis producta subgracilis</i>		X					
	<i>Megachile anograe</i>				X			
	<i>Megachile dentitarsus</i>				X			
	<i>Megachile legalis</i>				X			
	<i>Megachile nevadensis</i>				X			
	<i>Megachile snowi</i>				X			
	<i>Megachile umatillensis</i>				X			
	<i>Osmia austromaritima</i>				X			
	<i>Osmia iridis</i>				X			
	<i>Osmia lanei</i>				X*			
	<i>Osmia nigrobarbata</i>				X			
	<i>Osmia obliqua</i>				X			
	<i>Osmia odontogaster</i>			X				
	<i>Osmia pulsatillae</i>			X				
	<i>Osmia thyanisca</i>				X			
	<i>Osmia trifoliama</i>				X*			
Melittidae	<i>Macropis steironematis opaca</i>	X						

* possibly extirpated in Washington (NatureServe 2024).

Based on recent records of bees from adjacent states and British Columbia, we anticipate at least another 102 species are likely to be recorded in Washington state making the species richness more comparable to the nearly 700 species expected to occur in Oregon (Best et al. 2022). Future efforts should also target the 84 species that have not

been documented in over 50 years. It is likely many of these species have been undetected over time due to characteristics that make them inherently uncommon such as limited distributions, floral specialization, cleptoparasitic habits, or difficulty in identification (Colla et al. 2012). There are also many specimens in museum and private collections that, due to various reasons, are still waiting for identification or for formal species descriptions (Orr et al. 2021). As museums work towards digitizing their collections, some of these long-absent species may be rediscovered and new species may be detected or even described. Cleptoparasitic bee species have been found to be good indicator taxa for assessing bee communities (Sheffield et al. 2013a, 2013b), so determining the status of these missing cleptoparasitic species will help future assessments of the bee community health in Washington state.

Checklist

Sources used to compile this checklist: ¹GBIF (polygon); ²GBIF (without coordinates); ³Ascher and Pickering 2022 (Discover Life); ⁴Ratnasingham and Hebert 2007 (BOLD); ⁵Hanson Collection; ⁶WSDA; ⁷WSUC; ⁸Mayer et al. 2000; ⁹Rozen 1992; ¹⁰Fabian 2014; ¹¹LaBerge 1980; ¹²LaBerge 1973; ¹³LaBerge 1989; ¹⁴LaBerge and Ribble 1975; ¹⁵LaBerge 1986a; ¹⁶LaBerge 1985; ¹⁷LaBerge 1977; ¹⁸Bouseman and LaBerge 1978; ¹⁹LaBerge 1969; ²⁰LaBerge and Ribble 1972; ²¹LaBerge and Bouseman 1970; ²²Hanson and Ascher 2018; ²³Miliczky 2008; ²⁴Mitchell 1935a; ²⁵Mitchell 1937a; ²⁶Mitchell 1937b; ²⁷Mitchell 1935b; ²⁸Mitchell 1937c; ²⁹Mitchell 1936a; ³⁰Mitchell 1936b; ³¹Rightmyer et al. 2010; ³²Rhoades et al. 2017; ³³Looney et al. 2019; ³⁴Michener 1935; ³⁵Linsley 1939; ³⁶Adlakha 1969; ³⁷Stephen 1952; ³⁸Gibbs 2010; ³⁹Roberts 1973; ⁴⁰Sinha and Michener 1958; ⁴¹Gonzalez and Griswold 2013; ⁴²Michener 1938a; ⁴³Michener 1938b; ⁴⁴Michener 1939; ⁴⁵Michener 1938c; ⁴⁶Clement et al. 2006; ⁴⁷Koch et al. 2017; ⁴⁸Timberlake 1971; ⁴⁹LaBerge 1961; ⁵⁰Cockerell 1906a; ⁵¹Cockerell 1911; ⁵²Cockerell 1904; ⁵³Timberlake 1943; ⁵⁴Timberlake 1951; ⁵⁵Snelling 1970; ⁵⁶Gibbs 2011; ⁵⁷McGinley 2003; ⁵⁸Daly 1973; ⁵⁹Wilson et al. 2010; ⁶⁰Ribble 1974; ⁶¹Thompson and Pellmyr 1992; ⁶²Thorp 1969; ⁶³Ribble 1968; ⁶⁴Onuferko and Sheffield 2022; ⁶⁵Droege et al. 2010; ⁶⁶Timberlake 1958; ⁶⁷Timberlake 1968; ⁶⁸Ghisbain et al. 2020; ⁶⁹Koch et al. 2016; ⁷⁰Strange and Tripodi 2019; ⁷¹Shapiro et al. 2014; ⁷²LaBerge 1956a; ⁷³Onuferko 2017; ⁷⁴Onuferko 2018; ⁷⁵Rightmyer 2008; ⁷⁶Cockerell 1910; ⁷⁷Rodeck 1947; ⁷⁸Cane 2008; ⁷⁹Gardner and Gibbs 2020; ⁸⁰Gibbs et al. 2013; ⁸¹McGinley 1986; ⁸²Bohart 1948; ⁸³Snelling 1966; ⁸⁴Stephen 1954; ⁸⁵Donovan 1977; ⁸⁶Thorp and LaBerge 2005; ⁸⁷Crawford 1926; ⁸⁸Timberlake 1956; ⁸⁹Timberlake 1964; ⁹⁰Baker 1975; ⁹¹Grigarick and Stange 1968; ⁹²Mitchell 1944; ⁹³Raw 2002; ⁹⁴Mitchell 1942; ⁹⁵Mitchell 1927; ⁹⁶Hurd and Michener 1955; ⁹⁷Michener 1936a; ⁹⁸Swenk 1914; ⁹⁹Mitchell 1933; ¹⁰⁰Sandhouse 1939; ¹⁰¹White 1952; ¹⁰²Griswold 1983; ¹⁰³Michener 1947; ¹⁰⁴Rowe 2017; ¹⁰⁵Thorp et al. 1983; ¹⁰⁶Brooks 1983; ¹⁰⁷Orr et al. 2018; ¹⁰⁸LaBerge 1956b; ¹⁰⁹Timberlake 1969; ¹¹⁰Broemeling 1988; ¹¹¹Rodeck 1949; ¹¹²Tepedino and Griswold 1995; ¹¹³Viereck 1916; ¹¹⁴Cockerell 1937; ¹¹⁵Viereck et al. 1904a; ¹¹⁶Viereck et al. 1904b; ¹¹⁷Viereck et al. 1904c; ¹¹⁸Viereck et al. 1905; ¹¹⁹Viereck et

al. 1906; ¹²⁰Cockerell 1903; ¹²¹Cockerell 1906b; ¹²²Gardner and Gibbs 2023; ¹²³Rozen 1958; ¹²⁴National Park Service (personal communication); ¹²⁵Michener 1936b; ¹²⁶Swenk 1908; ¹²⁷Cockerell 1913; ¹²⁸Akre et al. 1982; ¹²⁹Cockerell 1912; ¹³⁰Taylor 2008; ¹³¹Mitchell 1938; ¹³²Zack 1984; ¹³³Waters 2023; ¹³⁴Miliczky 2000; ¹³⁵Green Collection; ¹³⁶Combs 2019

- † State record
- * Introduced
- § Species of possible conservation concern
- ‡ Most recent record before 1970

Andrenidae:Andreninae:Andrenini

Genus *Andrena* Fabricius

1. §‡ *Andrena (Andrena) aculeata* LaBerge, 1980. County records: Whitman¹¹. Seasonality: May¹¹ (1913¹¹). Conservation status: Vulnerable (Shepherd 2005a, National Research Council 2007)
2. ‡ *Andrena (Andrena) birtwelli* Cockerell, 1901. County records: Kittitas^{1,2,11}. Seasonality: Jul^{1,2} (1949^{1,2}). Collections: SEMC
3. *Andrena (Andrena) buckelli* Viereck, 1924. County records: Garfield^{1,2,3,46}, Kittitas^{1,2,11}, Whitman^{7,11}. Seasonality: May^{1,2,3}, Jun^{7,46}, Jul^{1,2} (1989^{1,2,3}). Collections: BBSL, SEMC, WSUC. Floral records: FABACEAE: *Astragalus* sp.³
4. *Andrena (Andrena) ceanothifloris cretata* LaBerge, 1980. County records: Okanogan^{1,2,3,59}. Seasonality: Jul^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL. Floral records: ERICACEAE: *Ledum glandulosum*^{3,59}
5. *Andrena (Andrena) frigida* Smith, 1853. County records: King^{1,2,3,11,117}, Kitsap^{2,3,11}, Pend Oreille^{3,11}, Pierce^{3,11}, Snohomish^{3,11}, Walla Walla³, Whitman^{3,11,117}, Yakima^{3,11}. Seasonality: Feb¹¹⁷, Mar^{1,2,3,117}, Apr^{2,3}, Jul² (1996^{1,2}). Collections: INHS, NYSM, UNHC, UCRC, WSUC. [= *Cilissa albihirta* Ashmead, 1890]
6. *Andrena (Andrena) hemileuca* Viereck, 1904. County records: Ferry^{3,11}, Island⁷, King^{1,2,3,7,11,117}, Kitsap^{3,11}, Lewis⁷, Pierce^{3,11}, Skagit¹⁰, Snohomish^{1,2,3}, Thurston¹³³, Whitman^{3,11,117}. Seasonality: Apr⁷, May^{1,2,3,7,133} (2017¹³³). Collections: ANSP, INHS, NMNH, SEMC, WSUC, WWUC. **Holotype**. USA, Washington Territory; PANS 10286. [= *Andrena (Andrena) asmi* Viereck, 1904]. **Holotype**. USA, Washington, Whitman County, Pullman; C. V. Piper. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ROSACEAE: *Sorbus scopulina*⁸.
7. ‡ *Andrena (Andrena) jennei* Viereck, 1916. County records: Yakima^{1,2,3,113}. Seasonality: May^{1,2,113} (1903^{1,2,113}). Collections: ANSP. **Holotype**. USA, Washington, Yakima County, North Yakima; 20 May 1903; Eldred Jenne; No. 60, ANSP 4013
8. † *Andrena (Andrena) laminibucca* Viereck and Cockerell, 1914. County records: Jefferson^{1,2}, Kittitas^{2,3}. Seasonality: May^{2,3}, Jun^{1,2} (2014^{1,2}). Collections: BBSL, INHS

9. † *Andrena (Andrena) macoupinensis* Robertson, 1900. County records: Benton^{2,3,7}, Kittitas^{2,3}, Yakima^{2,3}, Whitman⁷. Seasonality: Apr^{2,3,7} (1989^{2,3}). Collections: INHS, WSUC
10. *Andrena (Andrena) milwaukeensis* Graenicher, 1903. County records: Chelan^{1,2}, Kittitas⁷, Klickitat^{1,2}, Lewis^{1,2,4}, Spokane^{1,2,7}, Thurston¹³³. Seasonality: Apr^{1,2}, May^{1,2,4}, June¹³³ (2019¹³³). Collections: BBSL, RSKM, WSUC. Floral records: FABACEAE: *Lupinus albicaulis*¹³³
11. *Andrena (Andrena) perarmata* Cockerell, 1898. County records: King^{1,2,3,11}, Kitsap^{2,3}, Kittitas^{2,3}, Pierce^{3,11}, Thurston^{3,7,11}, Walla Walla^{1,2,3}, Whitman^{7,8}, Yakima^{3,11}. Seasonality: Feb^{1,2}, Mar^{1,2,3,7,11}, Apr^{1,2,3} (1989^{2,3}). Collections: BBSL, INHS, NMNH, WSUC. **Holotype**. USA, Washington, King County, Seattle; 15 March 1897; USNM 18982, USNM ENT 00533688. Floral records: APIACEAE: *Lomatium*⁸
12. ‡ *Andrena (Andrena) prolixa* LaBerge, 1980. County records: Pierce^{1,2,3,11}. Seasonality: Apr^{1,2,11} (1945^{1,2,11}). Collections: INHS
13. *Andrena (Andrena) rufosignata* Cockerell, 1902. County records: Clallam^{1,2,3,11}, King^{1,3,11}, Okanogan^{1,2,3,59}, Pierce^{3,11}, Thurston¹³³, Whatcom^{1,2}. Seasonality: May^{1,2,133}, Jun^{1,2,3,133}, Jul^{1,2,3} (2020¹³³). Collections: BBSL, INHS, OSUC, SEMC. Floral records: APIACEAE: *Lomatium pugetensis*¹³³; ASPARAGACEAE: *Camassia quamash*¹³³; BORAGINACEAE: *Myosotis laxa*⁵⁹; CAPRIFOLIACEAE: *Symphoricarpos albus*¹³³; ERICACEAE: *Phyllodoce empetrifomis*^{3,59}; OROBANCHACEAE: *Pedicularis bracteosa* var. *latifolia*⁵⁹; ROSACEAE: *Potentilla gracilis*¹³³
14. *Andrena (Andrena) saccata* Viereck, 1904. County records: Clallam^{1,2,3,11}, Grays Harbor^{3,11}, King^{1,2,3,11,117}, Pacific^{3,11}, Pierce^{1,2,3}, Snohomish^{2,3}, Walla Walla^{1,2,3}. Seasonality: Apr¹¹⁷, May^{1,2}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{2,3} (1975^{1,2,3}). Collections: BBSL, INHS, OSUC
15. † *Andrena (Andrena) schuhi* LaBerge, 1980. County records: Spokane^{1,2}, Whitman^{1,2,3,7}. Seasonality: Mar^{1,2}, Apr⁷, May^{1,2,7} (2011^{1,2}). Collections: BBSL, SEMC, WSUC
16. *Andrena (Andrena) thaspis* Graenicher, 1903. County records: Chelan^{3,11}, Clallam^{3,11}, Columbia^{1,2,3,11}, Garfield¹¹, Island¹¹, Jefferson^{1,2,3,11}, King^{1,2,3,11}, Kittitas^{2,3}, Pierce¹¹, San Juan¹¹, Skagit^{1,2,3,11}, Snohomish^{2,3}, Thurston^{1,2,3,11,117,133}, Whitman^{3,11}, Yakima^{3,11}. Seasonality: Jun^{1,2,3,117,133}, Jul^{1,2,3}, Aug^{2,3} (2020¹³³). Collections: AMNH, ANSP, BBSL, INHS, NMNH. [= *Andrena clypeoporaria* Viereck, 1904]. **Holotype**. USA, Washington, Thurston County, Olympia; 12 June 1895; PANS 10290. [= *Andrena indotata* Viereck, 1904]. **Holotype**. USA, Washington State; PANS 10295. Floral records: CAPRIFOLIACEAE: *Symphoricarpos albus*¹³³; FABACEAE: *Lupinus albicaulis*¹³³
17. *Andrena (Andrena) topazana* Cockerell, 1906. County records: Asotin^{3,11}, Columbia^{3,11}, Okanogan^{1,2,3,59}, Walla Walla^{1,2,3}, Whitman⁷. Seasonality: Jun^{1,2,3}, Jul^{1,2,7}, Aug^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL, WSUC. Floral records: ASTERACEAE: *Achillea millefolium*⁵⁹, *Cirsium arvense*⁸; ROSACEAE: *Potentilla gracilis*⁵⁹, *Rosa nutkana* ssp. *nutkana*^{3,59}

18. *Andrena (Andrena) vicinoides* Viereck, 1904. County records: Asotin^{3,11}, Clallam^{3,11}, **Island**⁷, King^{3,11}, Kitsap^{3,7,11}, Okanogan^{1,2,3,59}, Pacific^{3,11}, Pierce^{3,7,11}, San Juan^{1,2,11,124,136}, Skagit^{1,2,3,11,124}, Thurston^{3,11,117}, Whitman^{3,11}. Seasonality: May^{1,2,7}, Jun^{1,2,3,117}, Jul^{1,2,3,7} (2017¹³⁶). Collections: BBSL, PWRC, WSUC. Floral records: FABACEAE: *Lupinus sericeus*⁵⁹; ROSACEAE: *Potentilla gracilis*⁵⁹, *Rosa nutkana*¹³⁶
19. *Andrena (Andrena) washingtoni* Cockerell, 1901. County records: **Clallam**³, **Douglas**^{1,2,3}, King^{3,11,117}, Pierce^{1,2,3,11}, Skamania^{3,11}, Thurston^{1,3,11,117}. Seasonality: Apr¹¹⁷, May^{1,2,3,117}, Jun^{1,3,11,117}, Jul³ (2014³). Collections: BBSL, INHS, JRYA, NMNH. **Holotype**. USA, Washington, Thurston County, Olympia; 2 June 1895; Type No. 18938, USNM ENT 00533758
20. ‡ *Andrena (Callandrena sensu lato) helianthi* Robertson, 1891. County records: Whitman⁸. Seasonality: (1962–1963⁸). Collections: WSUC. Floral records: ASTERACEAE: *Helianthus annuus*⁸, *Solidago canadensis*⁸. Comments: Phylogenetic analyses (Larkin et al. 2006; Pisanty et al. 2021) have found the subgenus *Callandrena* to be paraphyletic. *Callandrena* in its strict sense was found to be monophyletic (Larkin et al. 2006; Pisanty et al. 2021). The remaining species, including *A. helianthi*, belong to another separate unnamed group that is sometimes referred to as *Callandrena sensu lato*.
21. † *Andrena (Cnemidandrena) colletina* Cockerell, 1906. County records: **Klickitat**^{2,3}. Seasonality: Sep^{2,3} (1989^{2,3}). Collections: INHS
22. *Andrena (Cnemidandrena) columbiana* Viereck, 1917. County records: **Benton**⁷, **Clallam**³, **Island**^{3,85}, **Jefferson**^{1,2}, King^{3,85}, Okanogan^{1,2,3,59}, Pacific^{1,2,3,85}, Pend Oreille^{3,85}, San Juan^{3,85}, **Snohomish**^{2,3}, **Thurston**⁷, **Whatcom**^{3,85}, **Yakima**^{3,85}. Seasonality: May^{1,2}, Jun^{1,2,85}, Jul^{1,2,85}, Aug^{1,2,3,85} (2015^{1,2,3}). Collections: BBSL, INHS, JRYA, WSUC. Floral records: ASTERACEAE: *Anaphalis margaritacea*^{3,59}
23. *Andrena (Cnemidandrena) nubecula* Smith, 1853. County records: Pend Oreille^{3,85}, **Walla Walla**^{2,3}, Whitman^{3,85}, Yakima^{3,85}. Seasonality: Aug² (1988^{2,3}). Collections: INHS
24. *Andrena (Cnemidandrena) scutellinitens* Viereck, 1916. County records: Okanogan^{1,2,3,59}. Seasonality: Aug^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL. Floral records: ASTERACEAE: *Achillea millefolium*⁵⁹, *Anaphalis margaritacea*⁵⁹, *Erigeron speciosus*^{3,59}
25. *Andrena (Cnemidandrena) sulcata* Donovan, 1977. County records: **Adams**^{1,3,85}, **Benton**^{2,3,7}, **Chelan**^{3,85}, **Yakima**^{2,3}. Seasonality: Sep^{1,2,3,7}, Oct² (1991²). Collections: INHS, NMNH, WSUC. **Holotype**. USA, Washington, Adams County, Ritzville; 9 September 1920; RC Shannon; Type No. 71075, USNM ENT 00533741. **Paratype**. USA, Washington, Chelan County, Wenatchee; 25 September 1938; J Standish
26. *Andrena (Cnemidandrena) surda* Cockerell, 1910. County records: Kittitas^{2,3,85}, Pacific^{3,85}, Yakima^{3,85}. Seasonality: Sep^{2,3} (1989^{2,3}). Collections: INHS
27. † *Andrena (Cremnandrena) anisochlora* Cockerell, 1936. County records: **Clark**^{1,2}. Seasonality: May^{1,2} (2020^{1,2}). Collections: iNaturalist
28. *Andrena (Dactylandrena) berberidis* Cockerell, 1905. County records: King^{3,16}, **Kittitas**^{2,3}, Pierce¹⁶, Thurston¹³³, Whitman^{3,16}. Seasonality: Apr², May^{2,3,133}, June¹³³ (2020¹³³). Collections: INHS. Floral records: ASPARAGACEAE:

*Camassia quamash*¹³³; ASTERACEAE: *Eriophyllum lanatum*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³

29. *Andrena (Dactylandrena) porterae* Cockerell, 1900. County records: King^{1,2,117}, Kittitas^{2,3}. Seasonality: Feb^{2,3}, Apr^{1,2,117} (1994²). Collections: INHS, NMNH. [= *Andrena neurona* Viereck, 1904]. **Holotype**. USA, Washington, King County, Seattle; 17 April 1896
30. *Andrena (Dasyandrena) cristata* Viereck, 1916. County records: Pierce^{3,17}
31. *Andrena (Dasyandrena) obscuripostica* Viereck, 1916. County records: Pierce¹⁷
32. *Andrena (Diandrena) chalybioides* (Viereck, 1904). Collections: NMNH. [= *Andrena (Parandrena) perchalybia* Viereck, 1916]. **Holotype**. USA, Washington State; HK Morrison
33. *Andrena (Diandrena) cuneilabris* Viereck, 1926. County records: Thurston¹³³. Seasonality: May¹³³ (2020¹³³). Floral records: RANUNCULACEAE: *Ranunculus occidentalis*¹³³
34. *Andrena (Diandrena) evoluta* Linsley and MacSwain, 1961. County records: Adams^{3,62}, Okanogan^{1,2,3,4,59}, Whitman^{3,7,62}. Seasonality: Apr⁷, Jun^{1,2,3,4}, Jul^{1,2,23} (2004^{1,2,3,4,59}). Collections: BBSL, WSUC. Floral records: ASTERACEAE: *Arnica sororia*⁵⁹, *Crepis atrabarba*^{3,59}; LILIACEAE: *Calochortus lyallii*⁵⁹
35. *Andrena (Diandrena) nothocalaidis* (Cockerell, 1905). County records: Adams^{3,62}, Benton^{1,2,7}, Chelan^{3,62}, Klickitat^{1,2}, Okanogan^{3,7,62}, Pierce⁶², Spokane^{1,2}, Whitman⁶², Yakima^{3,62}. Seasonality: Mar^{1,2}, May^{1,2}, Jun^{1,2}, Jul^{1,2} (2015^{1,2}). Collections: BBSL, WSUC
36. † *Andrena (Diandrena) subchalybea* Viereck, 1916. County records: Kittitas². Seasonality: Apr², May² (1989²). Collections: INHS
37. *Andrena (Geissandrena) trevoris* Cockerell, 1897. County records: Asotin^{2,3,20}, Columbia^{3,20}, Island^{3,20}, Jefferson^{3,20}, King^{1,3,20}, Kitsap^{3,20}, Klickitat^{3,20}, Pierce^{3,20}, San Juan^{2,3,20,136}, Thurston^{1,2,3,20,133}, Walla Walla^{1,2,3,20}, Whatcom³, Whitman^{2,3,20}. Seasonality: Jun^{1,2,20}, Jul^{1,2,133}, Aug³ (2017^{133,136}). Collections: BBSL, INHS, JRYA, NMNH, WSUC. [= *Andrena semipolita* Viereck, 1904]. **Holotype**. USA, Washington, Thurston County, Olympia; 12 June 1895; Type No. 18952, USNM ENT 00533746. Floral records: CAPRIFOLIACEAE: *Symphoricarpos albus*^{133,136}
38. *Andrena (Gonandrena) flocculosa* LaBerge and Ribble, 1972. County records: Kittitas^{2,3}, Pierce^{3,20}, Thurston¹³³, Whitman^{3,7,20}, Yakima^{1,2,3,7,20}. Seasonality: May^{1,2,3,20,133} (2017¹³³). Collections: INHS, NMNH, WSUC. **Holotype**. USA, Washington, Yakima County, North Yakima; 20 May 1903; E Jenne. **Lectotype**. USA, Washington, Pierce County, Parkland; 14 May 1962; R. Tentineh. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³
39. *Andrena (Holandrena) cressonii infasciata* Lanham, 1949. County records: Benton^{1,3,16}, King^{3,16}, Kittitas^{2,3}, Pierce^{3,16}, Walla Walla^{1,2,16}, Whitman^{1,2,3,7,8,16}, Yakima^{3,16}. Seasonality: Apr^{1,3,7}, May^{1,2,3,7}, Jun^{1,2,3,7} (2003²). Collections: BBSL, INHS, UCRC, WSUC
40. † *Andrena (Larandrena) miserabilis* Cresson, 1872. County records: Benton⁷, Kittitas^{2,3}, Okanogan⁷, Whitman⁷. Seasonality: May^{2,3} (1989^{2,3}). Collections: INHS, WSUC. Floral records: ROSACEAE: *Physocarpus malvaceus*⁸

41. *Andrena (Leucandrena) barbilabris* (Kirby, 1802) County records: **Benton**^{1,2,7}, **Chelan**⁷, Clallam^{1,2,3,15}, Island^{3,15}, King^{3,7,15,117}, Pacific^{3,15}, **Pierce**^{1,3}, Snohomish^{1,2,3,15}, Thurston^{3,15,117}, Whitman^{3,7,15}, **Yakima**⁷. Seasonality: Mar^{1,2}, Apr^{1,2,3,7,117}, May^{1,3,7}, Jun^{1,117}, Jul^{1,2}, Aug¹, Sep¹ (2015^{1,2}). Collections: AMNH, BBSL, INHS, UCRC, WSUC. [= *Andrena macgillivrayi* Cockerell, 1897]. [= *Andrena placida* Smith, 1853]
42. ‡ *Andrena (Melandrena) carlini* Cockerell, 1901. County records: King^{1,2,3,117}. Seasonality: Apr¹¹⁷, May^{1,2,3} (1919^{1,2,3}). Collections: OSUC. Floral records: GROSSULARIACEAE: *Ribes*¹¹⁷
43. *Andrena (Melandrena) cerasifolii* Cockerell, 1896. County records: Stevens^{3,15}, Whitman^{3,15}
44. ‡ *Andrena (Melandrena) commoda* Smith, 1879. County records: Columbia¹⁸, Klickitat^{3,18}, Pierce^{3,18}, Walla Walla^{3,18}, Whitman^{1,2,3,7,18}, Yakima^{3,18}. Seasonality: May^{3,7}, Jun^{1,2,3} (1969^{1,2,3}). Collections: BBSL, UCRC, WSUC
45. † *Andrena (Melandrena) cyanura* Cockerell, 1916. County records: **Benton**⁷, **Kittitas**⁷. Collections: WSUC
46. † *Andrena (Melandrena) erythrogaster* (Ashmead, 1890). County records: **Kittitas**^{2,3}. Seasonality: May^{2,3} (1989^{2,3}). Collections: INHS
47. *Andrena (Melandrena) hallii* Dunning, 1898. County records: Whitman^{1,2,3,21,117}. Collections: NMNH. **Lectotype**. USA, Washington, Whitman County, Pullman; CV Piper; USNM ENT 00533619
48. *Andrena (Melandrena) lupinorum* Cockerell, 1906. County records: King^{3,18}, Thurston¹³³, Whitman^{3,18}. Seasonality: April¹³³, May¹³³, June¹³³ (2020¹³³). Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³, *Symphoricarpos albus*¹³³; ERICACEAE: *Arctostaphylos uva-ursi*¹³³; LILIACEAE: *Fritillaria affinis*¹³³; ROSACEAE: *Potentilla gracilis*¹³³
49. *Andrena (Melandrena) nivalis* Smith, 1853. County records: Asotin^{3,18}, Benton^{3,7,18}, Garfield^{3,18}, **Jefferson**^{1,2}, King^{3,18}, **Klickitat**^{1,2}, Okanogan^{1,2,3,59}, Pierce^{3,18}, San Juan^{1,2,3,22,124}, **Spokane**^{1,2}, Thurston^{1,2,3,18,117,133}, Walla Walla^{3,18}, Whitman^{1,2,3,7,18,117}. Seasonality: Apr^{1,2,133}, May^{1,2,7,18,117,133}, Jun^{1,2,3,133}, Jul^{1,2} (2020¹³³). Collections: BBSL, NMNH, PWRC, WSUC. [= *Andrena compactiscopa* Viereck, 1904]. **Holotype**. USA, Washington, Whitman County, Pullman; CV Piper. [= *Andrena junonia* Viereck, 1904]. **Holotype**. USA, Washington, Whitman County, Pullman; May 1895; CV Piper. [= *Andrena pluvialis* Cockerell, 1901]. **Holotype**. USA, Washington, Thurston County, Olympia; 1 May 1894; T Kincaid; Type No. 18939, USNM ENT 00533694. [= *Andrena solidula* Viereck, 1904]. **Holotype**. USA, Washington, Whitman County, Pullman; CV Piper. Floral records: APIACEAE: *Lomatium utriculatum*¹³³; ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Taraxacum officinale*¹³³; ERICACEAE: *Arctostaphylos uva-ursi*¹³³; ONAGRACEAE: *Chamerion angustifolium*¹³³; ROSACEAE: *Physocarpus malvaceus*⁸, *Potentilla gracilis*¹³³, *Rosa nutkana* ssp. *nutkana*^{3,59}
50. *Andrena (Melandrena) perplexa* Smith, 1853. County records: **Cowlitz**^{1,2,3}, **Garfield**¹³⁵, **Kittitas**^{2,3}, Thurston¹³³, Whitman^{2,3,7,21,117}. Seasonality: Apr¹¹⁷,

- May^{1,2,3,7,117,133,135}, Jun^{7,133} (2023¹³⁵). Collections: BBSL, INHS, NMDG. [= *Andrena viburnella* Graenicher, 1903]. Floral records: BRASSICACEAE: *Teesdalia nudicaulis*¹³³; ROSACEAE: *Potentilla gracilis*¹³³
51. *Andrena (Melandrena) pertristis carliniformis* Viereck and Cockerell, 1914. County records: Chelan^{3,18}, San Juan⁵, Yakima^{3,18}. Seasonality: Apr⁵, May⁵ (2009⁵). Floral records: APIACEAE: *Heracleum sphondylium* ssp. *montanum*⁵; ASPARAGACEAE: *Camassia quamash*⁵; GERANIACEAE: *Geranium molle*⁵; RANUNCULACEAE: *Ranunculus californicus* × *occidentalis*⁵
52. † *Andrena (Melandrena) sola* Viereck, 1916. County records: Klickitat^{1,2}, San Juan^{1,2,3,6,124}, Spokane^{1,2}. Seasonality: Apr^{1,2}, May^{1,2}, Jun⁶ (2017⁶). Collections: BBSL, PWRC, WSDA
53. *Andrena (Melandrena) subaustralis* Cockerell, 1898. County records: Benton^{2,3,7}, Kittitas^{2,3}, Thurston¹³³, Whitman^{1,3,7,21,117}, Yakima^{3,21}. Seasonality: Apr^{1,2,3,7,133}, May⁷ (2017¹³³). Collections: INHS, WSUC. Floral records: ASTERACEAE: *Balsamorhiza sagittata*⁸, *Taraxacum officinale*¹³³
54. *Andrena (Melandrena) subtilis* Smith, 1879. County records: Island^{3,21}, Kittitas^{2,3,21}, San Juan^{5,136}, Spokane^{1,2,3,21}, Walla Walla^{3,21}, Whitman^{1,2,3,7,8,21,117}, Yakima^{3,21}. Seasonality: Apr^{1,2,5,7}, May^{2,3,5,7}, Jun^{1,7} (2017¹³⁶). Collections: BBSL, INHS, WSUC. Floral records: BRASSICACEAE: *Teesdalia nudicaulis*⁵; GERANIACEAE: *Geranium molle*⁵; RANUNCULACEAE: *Ranunculus californicus* × *occidentalis*⁵; ROSACEAE: *Rosa*⁸, *Rosa nutkana*¹³⁶
55. *Andrena (Melandrena) transnigra* Viereck, 1904. County records: Jefferson^{1,2}, King^{1,2,18,117}, Kitsap^{2,3,18}, Kittitas^{2,3,7}, Klickitat^{1,2}, Pierce^{1,2,3,18}, Skagit², Spokane^{3,18}, Stevens^{1,2}, Thurston^{7,133}. Seasonality: Mar⁷, Apr^{1,2,3,7,18,117,133}, May^{1,2,3,7}, Jun^{1,2,7} (2017¹³³). Collections: BBSL, BugGuide, INHS, NMNH, PCYU, WSUC. **Holotype.** USA, Washington, King County, Seattle; 17 April 1896; T Kincaid. Floral records: ERICACEAE: *Arctostaphylos uva-ursi*¹³³. Comments: Sheffield (2020) resurrected *Andrena cyanura* from synonymy with *Andrena transnigra*. We did not inspect all of the recorded specimens, and it is possible that some of these records represent *A. cyanura*.
56. *Andrena (Melandrena) vicina* Smith, 1853. County records: King^{3,18,117}, Kittitas^{2,3}, San Juan^{1,2,3,124,136}, Snohomish^{1,2,3,23}, Stevens^{1,3,18}, Thurston^{3,18,117,133}, Whitman⁸. Seasonality: Jan^{1,3}, Mar^{2,133}, Apr¹¹⁷, May^{1,2,3}, Jun^{1,117}, Jul^{1,2}, Aug^{1,2}, Nov^{2,3}, Dec² (2017^{133,136}). Collections: INHS, PWRC, WSUC. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Taraxacum officinale*¹³⁶; BERBERIDACEAE: *Berberis aquifolium*¹³⁶; GERANIACEAE: *Geranium viscosissimum*⁸; ROSACEAE: *Holodiscus discolor*⁸, *Physocarpus malvaceus*⁸, *Rosa*⁸, *Rubus parviflorus*⁸
57. ‡ *Andrena (Micrandrena) candidiformis* Viereck and Cockerell, 1914. County records: Spokane^{3,7,63}. Seasonality: Jun⁷ (1912⁷). Collections: WSUC
58. *Andrena (Micrandrena) chlorogaster* Viereck, 1904. County records: Chelan⁷, Kittitas^{2,3}, Klickitat^{1,2}, Thurston¹³³, Walla Walla^{3,63}, Whitman^{3,7,63}, Yakima^{2,3,7}. Seasonality: Apr^{1,2,3,7,133}, May^{1,3,7,133}, Jun¹³³ (2020¹³³). Collections: AMNH, INHS, WSUC. Floral records: APIACEAE: *Lomatium pugetensis*¹³³, *L. utriculatum*¹³³;

- ASTERACEAE: *Leucanthemum vulgare*¹³³; OROBANCHACEAE: *Castilleja levisecta*¹³³; RANUNCULACEAE: *Ranunculus occidentalis*¹³³; ROSACEAE: *Fragaria virginiana*¹³³, *Physocarpus malvaceus*⁸, *Potentilla*⁸, *P. gracilis*¹³³; SALICACEAE: *Salix*⁷
59. *Andrena (Micrandrena) illinoensis* Robertson, 1891. County records: Grant^{3,7,63}, Thurston¹³³, Whitman^{3,7,63,117}, Yakima^{2,3}. Seasonality: Apr^{2,3,7,117}, May^{3,7,133}, Jul⁷ (2017¹³³). Collections: INHS, UCRC, WSUC. Floral records: ROSACEAE: *Fragaria virgniana*¹³³
60. *Andrena (Micrandrena) melanochroa* Cockerell, 1898. County records: Chelan^{3,63}, Pierce⁷, Spokane^{1,2}, Thurston^{1,2,3,63,117}, Whitman^{3,7,8,63}. Seasonality: May^{1,2,7,117}, Jun^{1,2} (2011^{1,2}). Collections: BBSL, NMNH, WSUC. **Holotype**. USA, Washington, Thurston County, Olympia; 25 May 1894; T Kincaid; Type No. 18917, USNM ENT 00533649. Floral records: APIACEAE: *Lomatium*⁸; GROSSULARIACEAE: *Ribes aureum*⁸; ROSACEAE: *Malus domestica*⁸
61. *Andrena (Micrandrena) microchlora* Cockerell, 1922. County records: Benton^{1,2,3,7}, Kittitas⁷, Klickitat^{1,2,3,63}, Lincoln⁷, Spokane^{1,2}, Thurston¹³³, Whitman^{1,3,6,7,61,63}, Yakima^{2,3}. Seasonality: Mar^{1,2,7,61}, Apr^{1,2,3,7,61,133}, May^{1,2,6,7}, Jun⁷ (2018¹³³). Collections: BBSL, INHS, WSDA, WSUC. Floral records: APIACEAE: *Lomatium utriculatum*¹³³
62. ‡ *Andrena (Micrandrena) nigrae* Robertson, 1905. County records: Asotin⁶³, Whitman^{3,7,63}. Seasonality: May⁷ (1920⁷). Collections: WSUC
63. *Andrena (Micrandrena) piperi* Viereck, 1904. County records: Asotin^{3,63,135}, Benton^{1,2,3,7,63}, Chelan^{3,7,63}, Kittitas^{2,3}, Spokane^{1,2}, Walla Walla⁷, Whitman^{1,2,3,7,63,117}, Yakima^{2,3}. Seasonality: Mar¹³⁵, Apr^{1,2,3,63}, May^{1,2,3,63} (2021¹³⁵). Collections: BBSL, INHS, NMDG, WSUC. **Holotype**. USA, Washington, Whitman County, Pullman; CV Piper
64. ‡ *Andrena (Micrandrena) salictaria* Robertson, 1905. County records: Spokane^{3,7,63}, Whitman^{3,7,63}. Seasonality: Apr⁷, May⁷, Jun⁷, Jul⁷ (1930⁷). Collections: WSUC
65. *Andrena (Onagrandrena) raveni* Linsley and MacSwain, 1961. County records: Adams⁸⁶, Benton⁷. Seasonality: Apr⁷ (1995⁷). Collections: WSUC
66. *Andrena (Parandrena) andrenoides* (Cresson, 1878). County records: Garfield¹³⁵, Thurston¹¹⁷, Yakima^{2,3}. Seasonality: Apr^{2,3}, May^{117,135} (2023¹³⁵). Collections: INHS, NMDG. [= *Parandrena andrenoides* (Cresson, 1878)]
67. ‡ *Andrena (Parandrena) nevadensis* (Cresson, 1879). County records: Thurston^{3,20}, Whitman^{3,7,20}, Yakima^{3,20}. Seasonality: Apr⁷ (1936⁷). Collections: WSUC
68. *Andrena (Plastandrena) crataegi* Robertson, 1893. County records: Asotin⁷, King^{3,19}, Kittitas^{2,3}, Okanogan⁷, Pierce^{1,3,19}, Spokane⁷, Stevens^{3,7,19}, Thurston¹³³, Walla Walla^{1,2}, Whitman^{1,2,3,7}, Yakima^{3,7}. Seasonality: Jan¹, Apr^{2,3}, May^{2,7,133}, Jun^{1,2,3,7}, Jul^{1,2} (2017¹³³). Collections: BBSL, INHS, UCRC, WSUC. Floral records: APIACEAE: *Lomatium pugetensis*¹³³; ROSACEAE: *Physocarpus malvaceus*⁸
69. *Andrena (Plastandrena) prunorum prunorum* Cockerell, 1896. County records: Adams⁷, Asotin⁷, Benton^{1,2,3,7}, Chelan^{1,2,3,7}, Clallam^{1,2}, Ferry², Franklin^{1,2,3,7,19,117},

- Grant**^{1,2,3,7}, **Island**^{3,7,19}, **Jefferson**^{1,2}, **King**^{1,2,3,7,117}, **Kitsap**^{2,23,134}, **Kittitas**^{1,2,3,7}, **Klickitat**^{1,2,3}, **Lincoln**⁷, **Mason**⁷, **Okanogan**^{1,2,3,7,59}, **Pierce**⁷, **San Juan**^{1,2,3,5,6,19,22,124}, **Skagit**^{1,2}, **Snohomish**^{1,2,3,23}, **Spokane**^{1,2,3,7}, **Stevens**^{1,7}, **Thurston**^{1,2,3,6,19,117,133}, **Walla Walla**^{1,2,3,7,71}, **Whitman**^{1,2,3,6,7,8,117}, **Yakima**^{1,2,3,7,23}. Seasonality: Mar^{1,23,7}, Apr^{1,2,3,7,23}, May^{1,2,3,5,7,19,23,117,133}, Jun^{1,2,3,5,6,7,19,117,133}, Jul^{1,2,3,6,7,23,133}, Aug^{1,2,3,6,7}, Sep², Oct⁷ (2022^{1,2}). Collections: AMNH, BBSL, BugGuide, iNaturalist, INHS, NMNH, PCYU, PWRC, SEMC, WSDA, WSUC. [= *Andrena kincaidii* Cockerell, 1897]. **Holotype**. USA, Washington, Thurston County, Olympia; 2 June 1894; Type No. 3698, USNM ENT 00533636. [= *Andrena pascoensis* Cockerell, 1897]. **Holotype**. USA, Washington, Franklin County, Pasco; 25 May 1896; Type No. 18936, USNM ENT 00533683. Floral records: APIACEAE: *Chaerophyllum temulum*³, *Lomatium*⁸; ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Anaphalis margaritacea*^{3,59}; BRASSICACEAE: *Sisymbrium altissimum*⁸, *Teesdalia nudicaulis*¹³³; CACTACEAE: *Pediocactus nigrispinus*⁷; CARYOPHYLLACEAE: *Cersatium arvense*¹³³; GERANIACEAE: *Geranium viscosissimum*⁸; HYDRANGEACEAE: *Philadelphus lewisii*^{8,23}; ONAGRACEAE: *Clarkia amoena*¹³³; ROSACEAE: *Fragaria virginiana*¹³³, *Holodiscus discolor*⁸, *Physocarpus malvaceus*⁸, *Potentilla gracilis*¹³³; SALICACEAE: *Salix*⁷
70. *Andrena (Ptilandrena) astragali* Viereck and Cockerell, 1914. County records: **Jefferson**^{1,2}, **Kittitas**^{3,14}, **Okanogan**^{1,2,3,59}, **San Juan**⁵, **Spokane**^{1,2}, **Thurston**¹³³, **Whitman**⁷. Seasonality: Apr^{1,2}, May^{1,2,5,133}, Jun^{1,2,3,5,7,133} (2023⁷). Collections: BBSL, WSUC. Floral records: APIACEAE: *Lomatium pugetensis*¹³³; ASPARAGACEAE: *Triteleia hyacinthina*¹³³; ASTERACEAE: *Balsamorhiza deltoidea*¹³³, *Eriophyllum lanatum*¹³³, *Hypochaeris radicata*¹³³, *Leucanthemum vulgare*¹³³, *Solidago simplex*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³, *Symphoricarpos albus*¹³³; CARYOPHYLLACEAE: *Cerastium arvense*¹³³; FABACEAE: *Lupinus albicaulis*¹³³; MELANTHIACEAE: *Toxicoscordion venenosus*¹³³, *T. venenosum* var. *venenosum*⁵; RANUNCULACEAE: *Ranunculus occidentalis*¹³³; ROSACEAE: *Potentilla gracilis*¹³³
71. *Andrena (Ptilandrena) auricoma* Smith, 1879. County records: **Garfield**¹³⁵, **Kittitas**^{2,3}, **Walla Walla**^{3,14}, **Whitman**⁷. Seasonality: Apr², May¹³⁵, Jun⁷, Jul⁷ (2023¹³⁵). Collections: INHS, NMDG, WSUC. Floral records: ASTERACEAE: *Achillea millefolium*⁸; ROSACEAE: *Physocarpus malvaceus*⁸, *Potentilla*⁸
72. *Andrena (Ptilandrena) caerulea* Smith, 1879. County records: **Island**^{3,7}, **Kittitas**^{1,2,3,7}, **Klickitat**^{1,2}, **Lewis**⁷, **Pierce**¹⁴, **Thurston**^{1,2,3,14,117,133}, **Whitman**^{7,8}. Seasonality: Apr^{3,7,133}, May^{1,2,7,14,117,133}, Jun^{1,2,133}, Jul^{1,2} (2020¹³³). Collections: BBSL, NMNH, SEMC, UCRC, WSUC. [= *Andrena caerulea* var. *territa* Cockerell, 1898]. **Holotype**. USA, Washington, Thurston County, Olympia; 20 May 1894; Type No. 18943, USNM ENT 00533743. [= *Pterandrena acrypta* Viereck, 1904]. [= *Pterandrena erigenoides* Viereck, 1904]. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Microseris laciniata*¹³³; CARYOPHYLLACEAE: *Cerastium arvense*¹³³; CAPRIFOLIACEAE: *Symphoricarpos albus*¹³³; RANUNCULACEAE: *Ranunculus*⁸, *R. occidentalis*¹³³; ROSACEAE: *Prunus virginiana*⁸

73. *Andrena (Ptilandrena) chlorura* Cockerell, 1916. County records: King^{3,14}, Thurston¹³³, Whitman^{3,14}. Seasonality: May¹³³ (2017¹³³). Floral records: ROSACEAE: *Fragaria virginiana*¹³³
74. *Andrena (Ptilandrena) lawrencei* Viereck and Cockerell, 1914. County records: Benton^{1,2,7}, Kittitas^{2,3,7,14}, Okanogan¹⁴, Spokane^{1,2}, Whitman^{3,14}, Yakima^{3,14}. Seasonality: Mar^{1,2}, Apr^{1,2,3,7}, May^{1,2,7} (2015^{1,2}). Collections: BBSL, INHS, WSUC
75. *Andrena (Ptilandrena) nigrihirta* (Ashmead, 1890). County records: Clallam^{3,14}, Grays Harbor^{3,14}, King^{3,14}, Pierce^{1,3,14}, Spokane^{1,2}, Thurston¹³³, Whitman^{3,7,14,114,117}. Seasonality: Apr^{1,2}, May^{1,2,7,14,117}, Jun¹³³, Jul^{1,3} (2018¹³³). Collections: BBSL, INHS, WSUC. [= *Andrena decussata* Viereck, 1904]. **Holotype**. USA, Washington, Whitman County, Pullman. Floral records: CAPRIFOLIACEAE: *Symphoricarpos albus*¹³³
76. *Andrena (Ptilandrena) nigrocaerulea* Cockerell, 1897. County records: Chelan^{7,130}, Clallam^{3,14}, Columbia¹⁴, Island⁷, King^{1,2,3,14,117}, Kittitas^{3,14}, Klickitat^{1,2}, Pierce^{3,14}, San Juan^{1,2,124}, Spokane^{1,2}, Thurston^{3,14,117,133}, Walla Walla^{1,2,3,14}, Whitman^{1,2,3,6,7,8,14,61,117}, Yakima^{3,14}. Seasonality: Apr^{1,2,7,61,133}, May^{1,2,7,14,117,133}, Jun^{1,2,3,6,7,117,133}, Jul^{1,2,7} (2020¹³³). Collections: BBSL, NMNH, PWRC, WSDA, WSUC. [= *Andrena seattlensis* Viereck, 1904]. **Holotype**. USA, Washington, King County, Seattle; 17 May 1896. [= *Pterandrena nigrocaerulea* Viereck, 1904]. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Balsamorhiza deltoidea*¹³³, *Crepis capillaris*¹³³, *Eriophyllum lanatum*¹³³, *Hypochaeris radicata*¹³³, *Leucanthemum vulgare*¹³³, *Microseris laciniata*¹³³, *Taraxacum officinale*¹³³; BORAGINACEAE: *Hackelia venusta*¹³⁰; BRASSICACEAE: *Teesdalia nudicaulis*¹³³; CAMPANULACEAE: *Campanula rotundifolia*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³; CARYOPHYLLACEAE: *Cerastium arvense*¹³³; ERICACEAE: *Arctostaphylos uva-ursi*¹³³; FABACEAE: *Vicia sativa*¹³³; GERANIACEAE: *Geranium viscosissimum*⁸; IRIDACEAE: *Sisyrinchium idahoense*¹³³; PLANTAGINACEAE: *Collinsia grandiflora*¹³³; PLUMBAGINACEAE: *Armeria maritima*¹³³; RANUNCULACEAE: *Ranunculus occidentalis*¹³³; ROSACEAE: *Potentilla gracilis*¹³³
77. *Andrena (Ptilandrena) pallidiscopa* (Viereck, 1904). County records: Benton⁷, Kittitas⁷, Klickitat^{3,15}, Walla Walla^{3,15}, Whitman^{3,7,15}. Seasonality: Apr⁷, May⁷ (2023⁷). Collections: WSUC
78. *Andrena (Ptilandrena) ribblei* LaBerge, 1977. County records: Okanogan^{1,2,3,59}, Pierce^{3,17}. Seasonality: Jul^{1,2,3,17}, Aug¹⁷ (2004^{1,2,3,59}). Collections: BBSL. Floral records: BRASSICACEAE: *Smelowskia calycina*⁵⁹; POLEMONIACEAE: *Polemonium pulcherrimum*^{3,59}; ROSACEAE: *Potentilla gracilis*⁵⁹
79. *Andrena (Scaphandrena) chapmanae* Viereck, 1904. County records: Adams⁷, Chelan^{1,2,3}, Garfield^{1,2,3,10,46}, Klickitat^{1,2,7}, Whitman⁷. Seasonality: Mar⁷, Apr^{1,2}, May^{1,2,3}, Jun⁷ (2012^{1,2}). Collections: BBSL, WSUC
80. *Andrena (Scaphandrena) gordonii* Ribble, 1974. County records: Benton^{1,2}, Whitman⁶⁰. Seasonality: Mar^{1,2}, Apr^{1,2}, May⁶⁰ (2015^{1,2}). Collections: AMNH, BBSL. **Paratype**. USA, Washington, Whitman County, Pullman; May; AL Melander; WSU No. 402.

81. *Andrena (Scaphandrena) merriami* Cockerell, 1901. County records: Asotin^{3,60}, Benton^{1,2,3,7}, Kittitas^{2,3,60}, Klickitat^{1,2}, Okanogan⁷, Spokane^{1,2}, Walla Walla^{3,60}, Whitman^{1,2,3,6,7,8,60,117}, Yakima^{3,60}. Seasonality: Mar^{1,7}, Apr^{1,2,3,7,117}, May^{1,2,3,7,117}, Jul⁶ (2015^{1,2}). Collections: BBSL, INHS, WSDA, WSUC. [= *Andrena pullmani* Viereck, 1904]. **Holotype**. USA, Washington, Whitman County, Pullman. Floral records: APIACEAE: *Lomatium*⁸; ROSACEAE: *Prunus avium*⁸
82. *Andrena (Scaphandrena) scurra* Viereck, 1904. County records: Adams^{3,7,60}, Benton^{1,2,3,7,60}, Chelan^{1,2,3,7,60}, Garfield^{1,2,3,4,46}, Grant^{3,7,60}, Kittitas^{3,60}, Okanogan^{3,7,60}, Spokane^{1,2,3,60}, Walla Walla^{1,2,3}, Whitman^{1,2,3,4,7,60}. Seasonality: Mar^{1,2}, Apr^{1,2,3,7}, May^{1,2,3,4,7}, Jun^{1,2,3,7}, Jul^{1,2} (2015^{1,2}). Collections: BBSL, FMNH, INHS, PCYU, SEMC, WSUC
83. *Andrena (Scaphandrena) shoshoni* Ribble, 1974. County records: Whitman³². Seasonality: May³² (2013³²)
84. *Andrena (Scaphandrena) sladeni* Viereck, 1924. County records: Asotin^{3,60}, Benton⁷, Kittitas^{3,60}, Whitman^{7,61}, Yakima⁷. Seasonality: Mar^{7,61}, Apr^{7,61} (1991⁶¹). Collections: WSUC
85. ‡ *Andrena (Scaphandrena) walleyi* Cockerell, 1932. County records: Spokane^{3,60}, Whitman⁷. Seasonality: May⁷ (1918⁷). Collections: WSUC
86. *Andrena (Simandrena) angustitarsata* Viereck, 1904. County records: Asotin^{2,3,7,13}, Ferry^{1,2,3}, King^{1,2,3,7,13}, Kittitas², Klickitat^{1,2,3,13}, Lewis^{3,7,13}, Pierce^{3,7,13}, Spokane^{1,2,3,13}, Thurston¹³³, Walla Walla^{1,2,3,13}, Whitman^{1,2,3,6,7,8,13,61,117}. Seasonality: Mar^{3,7,61}, Apr^{1,2,7,133}, May^{1,2,3,7,133}, Jun^{1,2,6,7,133} (2020¹³³). Collections: AMNH, BBSL, INHS, NMNH, SEMC, UCDC, UCRC, WSDA, WSUC. [*Andrena (Simandrena) angustitarsata* Viereck, 1904]. **Holotype**. USA, Washington Territory. [= *Andrena mustelicolor* Viereck, 1904]. **Holotype**. USA, Washington, Whitman County, Pullman; CV Piper. Floral records: APIACEAE: *Lomatium*⁸, *L. pugetensis*¹³³, *L. utriculatum*¹³³; ASTERACEAE: *Achillea millefolium*¹³³, *Balsamorhiza deltoidea*¹³³, *Eriophyllum lanatum*¹³³; BRASSICACEAE: *Lepidium campestre*¹³³, *Teesdalia nudicaulis*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³; RANUNCULACEAE: *Ranunculus*⁸; ROSACEAE: *Malus domestica*⁸, *Physocarpus malvaceus*⁸, *Potentilla gracilis*¹³³, *Prunus virginiana*⁸, *Sorbus scopulina*⁸, *Rosa*⁸, *Rubus parviflorus*⁸
87. *Andrena (Simandrena) orthocarpus* Cockerell, 1936. County records: Klickitat^{1,2,3,13}, Thurston¹³³. Seasonality: Apr^{1,2}, May¹³³ (2020¹³³). Collections: AMNH. Floral records: APIACEAE: *Lomatium pugetensis*¹³³, *L. utriculatum*¹³³
88. *Andrena (Simandrena) pallidifovea* (Viereck, 1904). County records: Benton^{1,3,7,13}, Chelan^{1,2,3}, Kittitas^{2,3}, Spokane^{1,2,3,13}, Thurston¹³³, Walla Walla^{1,2,3,13}, Whitman^{3,7,8,13,117}, Yakima^{3,7,13}. Seasonality: May^{1,2,3,7}, Jun^{1,2,7,133}, Jul¹ (2019¹³³). Collections: BBSL, INHS, WSUC. [= *Pterandrena pallidifovea* Viereck, 1904]. Floral records: ASTERACEAE: *Eriophyllum lanatum*^{8,133}, *Solidago simplex*¹³³
89. †* *Andrena (Taeniandrena) wilkella* (Kirby, 1802). County records: Whitman⁷. Seasonality: May⁷, Jun⁷ (2023⁷). Collections: WFBM, WSUC
90. *Andrena (Thysandrena) candida* Smith, 1879. County records: Adams^{3,17}, Asotin^{3,17}, Benton^{2,3,7}, Clark^{3,17}, Island^{2,3,7,17}, King^{1,2,3,17,117}, Kitsap^{2,3}, Pacific^{3,17},

- Pierce^{1,2,3,7,17}, San Juan^{3,17}, Skagit^{1,2,3,17}, **Spokane**^{1,2}, Thurston^{117,133}, Walla Walla^{1,2,3,17}, Whatcom^{1,3,17}, Whitman^{3,7,8,17,117}, Yakima^{3,7,17}. Seasonality: Feb², Mar^{2,3,7,117}, Apr^{1,2,3,7,117}, May^{1,2,7,133}, Jun^{1,2,117,133}, Jul^{1,2,3,7} (2020¹³³). Collections: AMNH, BBSL, INHS, NMNH, UCDC, UCRC, WSUC. [= *Andrena subcandida* Viereck, 1904]. **Holotype**. USA, Washington, King County, Seattle; 14 March 1896; T Kincaid. Floral records: APIACEAE: *Lomatium*⁸, *L. utriculatum*¹³³; ASTERACEAE: *Balsamorhiza sagittata*⁸; LAMIACEAE: *Prunella vulgaris*¹³³; ROSACEAE: *Prunus avium*⁸
91. *Andrena (Thysandrena) knuthiana* Cockerell, 1901. County records: **Clallam**³, King^{3,17}, Okanogan^{1,2,3,59}, Pierce^{3,17}, San Juan^{3,5,17}, **Snohomish**⁷, Walla Walla^{3,17}, Whitman^{3,7,17}. Seasonality: Apr^{5,7}, Jul^{1,2,3,7} (2014³). Collections: BBSL, JRYA, WSUC
92. *Andrena (Thysandrena) medionitens* Cockerell, 1902. County records: Franklin^{1,2,3,17,117}, **Grant**⁷, Kittitas^{1,2,3,17}, Pierce^{3,17}, **Spokane**⁷, Walla Walla^{1,2,3,17}, Whitman^{1,2,3,17}. Seasonality: May^{1,2,7,17,117}, Jun¹, Jul^{1,2} (2003²). Collections: BBSL, INHS, NMNH, SEMC, WSUC. **Holotype**. USA, Washington, Franklin County, Pasco; 25 May 1896; Type No. 18921, USNM ENT 00533648
93. ‡ *Andrena (Thysandrena) trizonata* (Ashmead, 1890). County records: **Pierce**^{1,3}, Whitman^{3,17}. Seasonality: Mar¹, Apr^{1,3} (1946^{1,3}). Collections: INHS. Floral records: ROSACEAE: *Physocarpus malvaceus*⁸
94. *Andrena (Thysandrena) vierecki* Cockerell, 1904. County records: King^{3,17}, **Kittitas**^{2,3}, Klickitat¹⁷, Thurston¹³³, Whitman^{3,7,17}, Yakima^{3,17}. Seasonality: Apr^{2,3}, May⁷, Jun¹³³ (2018¹³³). Collections: INHS, WSUC. Floral records: CAPRIFOLIACEAE: *Symphoricarpos albus*¹³³
95. *Andrena (Thysandrena) w-scripta* Viereck, 1904. County records: Asotin^{3,17}, **Benton**⁷, Chelan^{3,17}, **Clallam**³, Ferry^{1,2,3,17}, King^{2,3,17}, **Kitsap**^{2,3}, **Kittitas**^{2,3}, **Klickitat**^{1,2}, Pierce^{3,17}, **Snohomish**^{1,3}, **Spokane**^{1,2}, Thurston¹³³, Walla Walla^{3,17}, Whitman^{2,3,7,17}, **Yakima**^{2,3}. Seasonality: Mar⁷, Apr^{2,3,7}, May^{1,2,3,7,133}, Jul^{1,2,3}, Aug^{1,2}, Nov^{1,3} (2020¹³³). Collections: BBSL, INHS, JRYA, SEMC, WSUC. Floral records: APIACEAE: *Lomatium pugetensis*¹³³
96. *Andrena (Trachandrena) amphibola* (Viereck, 1904). County records: Asotin^{3,12}, **Benton**^{1,2}, Chelan^{3,12}, Island^{3,7,12}, Jefferson^{3,12}, King^{2,3,12}, Kitsap^{3,12}, **Kittitas**³, **Klickitat**^{1,2}, Mason^{3,12}, **Pacific**^{1,2,7}, San Juan^{1,2,3,12}, Thurston^{3,7,12,133}, Whitman^{3,7,8,12}. Seasonality: Apr^{1,2,3,7}, May^{1,7,133}, Jun⁷, Jul^{1,7} (2019¹³³). Collections: BBSL, EMEC, INHS, NMNH, UCRC, WSUC. [= *Trachandrena crassihirta* Viereck, 1904]. **Holotype**. USA, Washington State (presumably)^{12,116}. [= *Trachandrena hadra* Viereck, 1904]. **Holotype**. USA, Washington Territory. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; LAMIACEAE: *Agastache urticifolia*⁸
97. ‡ *Andrena (Trachandrena) cleodora cleodora* (Viereck, 1904). County records: King^{2,3,12}, Kitsap^{3,12}, Klickitat^{3,12}, Pierce^{3,12}, Stevens^{3,12}, Whitman^{3,12}, Yakima^{3,12}. Seasonality: Jul³ (1927³). Collections: INHS, UCRC
98. *Andrena (Trachandrena) cupreotincta* Cockerell, 1901. County records: **Benton**^{1,2,3,7}, Ferry^{3,12}, Island^{3,12}, King^{1,2,3,12}, **Kittitas**^{2,3}, Lincoln^{3,7,12}, Mason^{1,2,3,12,116}, Pacific^{3,12}, Pierce^{3,12}, San Juan^{3,12}, Snohomish^{3,12}, Spokane^{3,12}, Stevens^{3,12},

- Thurston^{3,12,133}, Walla Walla^{3,12}, Whitman^{3,7,12}. Seasonality: Apr^{1,2,3,7,12}, May^{1,2,3,7,12,133}, Jun^{2,7} (2017¹³³). Collections: AMNH, BBSL, INHS, NMNH, UCDC, WSUC. **Holotype**. USA, Washington, Mason County, Skokomish River; 26 April 1892; T Kincaid; Type No. 18937, USNM ENT 00532972. [= *Trachandrena ochreopleura* Viereck, 1904]. **Holotype**. USA, Washington, Mason County, Skokomish River; 5 May 1912; USNM Type No 28535. Floral records: PLUMBAGINACEAE: *Armeria maritima*¹³³
99. ‡ *Andrena (Trachandrena) cyanophila* Cockerell, 1906. County records: Spokane^{1,2,3,12}, Whitman^{3,7,12}. Seasonality: May⁷, Jun⁷, Jul^{1,2} (1945^{1,2}). Collections: INHS, WSUC
100. ‡ *Andrena (Trachandrena) forbesii* Robertson, 1891. County records: Spokane³, Whitman^{1,3,7,12}. Seasonality: Apr⁷, May^{1,3,7}, Jun^{1,7} (1924³). Collections: BBSL, INHS, UCRC, WSUC
101. *Andrena (Trachandrena) fuscicauda* (Viereck, 1904). County records: King^{1,2,3,12}, Kitsap^{3,12}, Pacific⁷, Pierce^{1,2,3}, Thurston¹³³. Seasonality: Apr^{1,2,3,7}, May^{1,2,133} (2018¹³³). Collections: INHS, NMNH, UCDC, WSUC. [= *Trachandrena fuscicauda* Viereck, 1904]. **Holotype**. USA, Washington Territory; PANS 10293. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³
102. †‡ *Andrena (Trachandrena) hippotes* Robertson, 1895. County records: Benton⁷, Pierce³, Whitman^{1,3,7}, Yakima^{1,3}. Seasonality: Apr^{1,3,7}, May^{1,7}, Jun^{3,7} (1966³). Collections: CUIC, INHS, WSUC
103. *Andrena (Trachandrena) mariae* Robertson, 1891. County records: Lincoln⁷, Thurston¹³³, Whitman^{3,7,12}. Seasonality: Apr¹³³, May¹³³, Jun⁷ (2017¹³³). Collections: WSUC. Floral records: APIACEAE: *Lomatium utriculatum*¹³³; CARYOPHYLLACEAE: *Cersatium arvense*¹³³
104. *Andrena (Trachandrena) miranda* Smith, 1879. County records: Asotin^{3,12}, Columbia¹², King^{3,12}, Kitsap^{3,12}, Klickitat^{1,2}, Okanogan^{1,2,3,59}, Pend Oreille^{3,12}, Pierce^{3,12}, Spokane^{1,2}, Stevens^{3,12}, Thurston^{1,2,3,12,133}, Walla Walla^{3,12}, Whatcom⁶, Whitman^{2,3,7,12}. Seasonality: May^{7,133}, Jun^{1,2,3,6,7,12,133}, Jul^{1,2,3,7}, Aug^{1,2} (2020¹³³). Collections: BBSL, CUIC, INHS, NMNH, WSDA, WSUC. [= *Andrena grandior* Cockerell, 1897]. **Holotype**. USA, Washington, Thurston County, Olympia; 18 June 1895; Type No. 18954, USNM ENT 00533617. Floral records: APIACEAE: *Lomatium utriculatum*¹³³; ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Achillea millefolium*¹³³; BRASSICACEAE: *Lepidium campestris*¹³³; CAPRIFOLIACEAE: *Symphoricarpos albus*¹³³; ROSACEAE: *Potentilla gracilis*^{3,59}, *Rubus parviflorus*^{3,59}
105. *Andrena (Trachandrena) quintiliformis* Viereck, 1916. County records: Okanogan^{1,2,3,59}, Whitman^{3,7,12}, Yakima^{3,12}. Seasonality: May⁷, Jun^{1,2,3,7}, Jul^{1,2,3,7}, Aug^{1,2,3} (2004^{1,2,3}). Collections: BBSL, WSUC. Floral records: ROSACEAE: *Potentilla gracilis*^{3,59}
106. *Andrena (Trachandrena) salicifloris* Cockerell, 1897. County records: Clallam^{3,12}, Grays Harbor^{3,12}, Island^{3,12}, Jefferson^{1,2,3}, King^{2,3,7,12,116}, Kitsap^{2,3,12}, Klickitat^{1,2,3}, Okanogan^{1,2,3,59}, Pacific^{3,12}, Pierce^{1,2,3,12}, Skagit¹⁰, Snohomish^{1,2,3,12},

- Spokane**^{1,2}, **Stevens**^{1,2}, **Thurston**^{1,2,3,12,116,133}, **Whitman**^{1,3,7,12}. Seasonality: Apr^{1,2,3,7,12,116}, May^{1,2,3,7,12,116,133}, Jun^{1,2,3,7}, Jul^{1,3}, Aug², Sep¹, Nov^{1,3} (2017¹³³). Collections: AMNH, BBSL, INHS, NMNH, OSUC, UCMC, WSUC, WWUC. [= *Trachandrena auricauda* Viereck, 1904]. **Holotype**. USA, Washington State. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; GROSSULARIACEAE: *Ribes*¹¹⁶; ROSACEAE: *Rosa nutkana* ssp. *nutkana*^{3,59}; SALICACEAE: *Salix*¹¹⁶
107. *Andrena (Trachandrena) semipunctata* **Cockerell, 1902**. County records: King^{1,2,3,12}, **Kittitas**^{2,3}, Lincoln^{3,12}, Yakima^{2,3,12}. Seasonality: Apr^{1,2,3,12}, Jun^{1,2} (1989^{2,3}). Collections: INHS, NMNH. **Holotype**. USA, Washington, King County, Seattle; 5 April 1896; T Kincaid; Type No. 18922, USNM ENT 00533728
108. *Andrena (Trachandrena) sigmundi* **Cockerell, 1902**. County records: **Kitsap**^{2,3}, **Thurston**¹³³, **Whitman**^{3,12}. Seasonality: Apr^{2,3}, May¹³³ (2019¹³³). Collections: INHS. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³
109. *Andrena (Trachandrena) striatifrons* **Cockerell, 1897**. County records: **Benton**⁷, King^{3,12}, **Kittitas**^{2,3}, Pacific^{3,12}, Pierce^{3,12}, **Thurston**^{1,2,3,12}, **Whitman**^{1,2,3,7,12}, Yakima^{2,3,7,12}. Seasonality: Apr^{1,2,3,7,12}, May⁷, Jun^{3,7} (1989^{2,3}). Collections: INHS, NMNH, WSUC. **Holotype**. USA, Washington, Thurston County, Olympia; 19 April 1894; T Kincaid; Type No. 18945, USNM ENT 533735. [= *Trachandrena pernuda* Viereck, 1904]. **Holotype**. USA, Washington, Whitman County, Pullman; CV Piper.

Panurginae: Calliopsini

Genus *Calliopsis* Smith

110. *Calliopsis (Nomadopsis) edwardsii* **Cresson, 1878**. County records: **Klickitat**^{1,2}, **Spokane**³. Seasonality: Jul^{1,2,3}, Aug^{1,2}, Sep^{1,2} (2011^{1,2}). Collections: BBSL, UCRC
111. *Calliopsis (Nomadopsis) personata* **Cockerell, 1897**. County records: **Adams**³, **Benton**^{1,2,3}, Franklin^{1,2,118,123}, **Walla Walla**^{1,2,3}. Seasonality: May^{1,2,3,118,123}, Jun^{1,2,3}, Jul^{1,2,3} (1995^{1,2,3}). Collections: AMNH, BBSL, NMNH, UCRC. **Holotype**. USA, Washington, Franklin County, Pasco; 25 May 1896; Type No. 18985, USNM ENT 00533826.
112. †† *Calliopsis (Nomadopsis) scutellaris* **Fowler, 1899**. County records: **Adams**³. Seasonality: Jul³ (1920³). Collections: UCRC
113. ‡ *Calliopsis (Nomadopsis) xenus* (**Rozen, 1958**). County records: Pierce¹²³ (Yakima^{1,2,3}). Seasonality: Jul^{1,2,3,123} (1949^{1,2,3,123}). Collections: SEMC. **Paratype**. USA, Washington, Chinook Pass; 29 July 1949; RH Beamer. Floral records: BORAGINACEAE: *Mertensia paniculata*^{1,2}; HYDROPHYLLACEAE: *Phacelia hastata* var. *hastata*^{1,2}. Comments: The paratype label describes the locality as only Chinook Pass, Wash., which is located on the Pierce and Yakima County line. Rozen (1958) reports the paratype as being collected in Pierce County. Discover Life and GBIF report the paratype as being collected in Yakima County. It is unclear which county is correct, so both counties are being presented here with preference given to Rozen (1958).

Panurgini

Genus *Panurginus* Nylander

114. *Panurginus atriceps* (Cresson, 1878). County records: **Clark**^{1,2}, **Cowlitz**^{1,2,3}, **King**^{34,118}, **Skagit**^{1,2,3}, **Thurston**⁸⁷, **Whitman**^{1,2,3}, **Yakima**^{1,2,3}. Seasonality: May^{1,2,118}, Jun^{1,2,3,118}, Jul^{1,2,3,118}, Aug^{1,2,3} (2014³). Collections: BBSL, JRYA, NMNH, PWRC, SEMC. Floral records: ROSACEAE: *Rubus ursinus*¹¹⁸
115. *Panurginus ineptus* Cockerell, 1922. County records: **Clallam**³, **Pierce**^{1,2,3,48}, **Skagit**³. Seasonality: Jul^{1,2,3,48}, Aug^{1,2,3} (2014³). Collections: AMNH, BBSL, JRYA, OSUC
116. † *Panurginus nigrellus* Crawford, 1926. County records: **Klickitat**⁷. Seasonality: Jun⁷ (1975⁷). Collections: WSUC

Perditini

Genus *Perdita* Smith

117. *Perdita* (*Cockerellia*) *albipennis* Cresson, 1868. Comments: Viereck et al. (1905) indicate that *P. albipennis* is present in Washington, but do not provide a locality.
118. *Perdita* (*Cockerellia*) *lingualis* Cockerell, 1896. County records: **Whitman**^{1,2,3,8}. Seasonality: Sep^{1,2,3} (1982^{1,2,3}). Collections: BBSL, WSUC. Floral records: ASTERACEAE: *Helianthus annuus*⁸; GERANIACEAE: *Geranium viscosissimum*⁸; ROSACEAE: *Rosa*⁸
119. ‡ *Perdita* (*Perdita*) *ciliata* Timberlake, 1958. County records: **Chelan**^{2,67,112}. Seasonality: Aug^{2,67} (1941^{2,67,112}). Collections: LACM. [= *Perdita crassihirta* Timberlake, 1968]. **Holotype**. USA, Washington, Chelan County, Wenatchee; 21 August 1941; J Roberds; LACM ENT 164669. Conservation status: Data Deficient (National Research Council 2007)
120. *Perdita* (*Perdita*) *oregonensis* Timberlake, 1929. County records: **Benton**⁷, **Franklin**⁶⁶. Seasonality: Sep⁶⁶, Oct⁷ (1994⁷). Collections: WSUC
121. *Perdita* (*Perdita*) *salicis imperialis* Cockerell, 1925. County records: **Asotin**⁸⁹, **Benton**⁷, **Spokane**⁸⁹, **Walla Walla**⁸⁹, **Whitman**⁸⁹. Seasonality: May^{7,89}, Jun⁸⁹, Jul⁸⁹ (1994⁷). Collections: WSUC
122. §‡ *Perdita* (*Perdita*) *similis pascoensis* Timberlake, 1958. County records: **Franklin**^{1,2,3,66,112}. Seasonality: Sep^{1,2,3,66} (1904^{1,2,3,66}). Collections: NMNH. **Holotype**. USA, Washington, Franklin County, Pasco; 11 September 1904; ESG Titus; Type No. 64325, USNM ENT 00532871. Conservation status: Vulnerable (National Research Council 2007)
123. † *Perdita* (*Perdita*) *zonalis* Cresson, 1879. County records: **Whitman**^{1,2,3}. Seasonality: Sep^{1,2,3} (1982^{1,2,3})
124. ‡ *Perdita* (*Pygoperdita*) *nevadensis nevadensis* Cockerell, 1896. County records: **Chelan**^{1,2,3,88}, **Spokane**^{1,2,3}. Seasonality: Jul^{1,2,3,88} (1949^{1,2,88}). Collections: BBSL, INHS, SEMC, UCRC

125. *Perdita (Pygoperdita) wyomingensis* Cockerell, 1922. County records: Whitman³. Seasonality: Jun³ (1962³). Collections: UCRC
- 125a. § *Perdita (Pygoperdita) wyomingensis sculleni* Timberlake, 1956. County records: Whitman^{8,88}, Yakima⁶. Seasonality: Jun⁸⁸, Jul^{6,88} (2022⁶). Collections: WSDA, WSUC. Conservation status: Vulnerable (National Research Council 2007). Floral records: ASTERACEAE: *Achillea millefolium*⁸; ROSACEAE: *Holodiscus discolor*⁸
- 125b. † *Perdita (Pygoperdita) wyomingensis segona* Timberlake, 1956. County records: Benton^{1,2}, Spokane^{1,2}. Seasonality: May^{1,2}, Jun^{1,2}, Jul^{1,2} (2015^{1,2}). Collections: BBSL

Apidae:Anthophorinae:Anthophorini

Genus *Anthophora* Latreille

126. *Anthophora (Clisodon) terminalis* Cresson, 1869. County records: Benton^{1,2}, Okanogan^{1,2,3}, Pierce^{1,2,3,6}, San Juan^{1,2,3,124,136}, Spokane^{1,2}, Thurston^{1,2,118}, Whatcom⁶, Whitman^{1,2,3}. Seasonality: Jun^{1,2,3}, Jul^{1,2,3,6,118}, Aug⁶ (2021^{1,2}). Collections: BBSL, iNaturalist, NMNH, PWRC, SEMC, WSDA. [= *Podalirius syringae* Cockerell, 1898]. **Holotype**. USA, Washington, Thurston County, Olympia; 2 July 1896; Type No. 20234, USNM ENT 00534169. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: CONVOLVULACEAE: *Calystegia soldanella*¹³⁶
127. *Anthophora (Lophanthophora) affabilis* Cresson, 1878. County records: Whitman³². Seasonality: Jun³² (2013³²). Conservation status: G5 – Secure globally (NatureServe 2024)
128. †§ *Anthophora (Lophanthophora) neglecta* Timberlake and Cockerell, 1936. County records: Benton^{1,2,3}. Seasonality: Apr^{1,2,3} (1995^{1,2,3}). Collections: BBSL. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
129. *Anthophora (Lophanthophora) pacifica* Cresson, 1878. County records: Benton^{1,2,3}, Chelan^{1,2,3}, King^{1,2}, Kittitas^{2,3}, Okanogan^{1,2,3}, Spokane^{1,2}, Whitman^{1,2,3,8,61}, Yakima^{1,2,3,121}. Seasonality: Feb^{1,2}, Mar^{1,2}, Apr^{1,2,3,61}, May^{1,2,3,121} (2022^{1,2}). Collections: BBSL, iNaturalist, INHS, SEMC, WSUC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: APIACEAE: *Lomatium*⁸; ASTERACEAE: *Balsamorhiza sagittata*⁸; FABACEAE: *Astragalus columbianus*³, *A. sinuatus*³; GROSSULARIACEAE: *Ribes*³, *R. aureum*⁸; LAMIACEAE: *Salvia dorrii*³; OLEACEAE: *Syringa*⁸; ROSACEAE: *Malus domestica*⁸, *Prunus armeniaca*⁸
130. *Anthophora (Lophanthophora) porterae* Cockerell, 1900. County records: Benton^{1,2,3}, Chelan¹³⁶, Garfield^{1,2,3,46}, Walla Walla^{1,2}, Whitman^{1,2}, Yakima^{1,2,3}. Seasonality: Apr^{1,2,3}, May^{1,2,3} (2012^{1,2}). Collections: BBSL, SEMC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: FABACEAE: *Astragalus*³, *A. columbianus*³, *A. speirocarpus*³

131. *Anthophora (Lophanthophora) ursina* Cresson, 1869. County records: Adams³, Garfield^{1,2,3,46}, Okanogan^{1,2,3,59}, Spokane^{1,2}, Walla Walla^{1,2,3}, Whitman^{1,2,8}, Yakima^{2,121}. Seasonality: Mar^{1,2}, Apr^{1,2,3}, May^{1,2,3,121}, Jun^{1,2,3}, Jul^{1,2} (2015^{1,2}). Collections: BBSL, SEMC, UCRC, WSUC. [= *Anthophora similima* Cresson, 1879]. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: FABACEAE: *Astragalus*³, *Vicia villosa*⁸; ROSACEAE: *Rosa nutkana* ssp. *nutkana*^{3,59}
132. *Anthophora (Melea) bomboides* Kirby, 1837. County records: Chelan^{1,2,3}, Clallam^{1,2}, Garfield^{1,2,3,46}, Island^{2,3,106}, Jefferson^{1,2}, King^{1,2,106}, Kittitas^{1,2}, Pierce^{1,2,6}, San Juan^{1,2,3,5,6,22,106,136}, Spokane^{1,2}, Thurston^{1,2,106}, Walla Walla^{1,2}, Whatcom^{2,106}, Whitman^{8,106}, Yakima^{1,2,3,121}. Seasonality: Apr^{1,2}, May^{1,2,3,121}, Jun^{1,2,3,5,6}, Jul^{1,2,6}, Aug^{2,3,6} (2020^{1,2,6}). Collections: BBSL, iNaturalist, PMNH, PWRC, SEMC, UCRC, WSDA, WSUC. [= *Anthophora sodalis* Cresson, 1879]. [= *Anthophora bomboides solitaria* Ritsema, 1880]. [= *Anthophora bomboides stanfordiana* Cockerell, 1904]. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASPARAGACEAE: *Brodiaea coronaria*⁵; ASTERACEAE: *Balsamorhiza*³; BRASSICACEAE: *Cakile maritima*¹³⁶; CAPRIFOLIACEAE: *Symphoricarpos albus*¹³⁶; CONVULVACEAE: *Calystegia soldanella*¹³⁶; FABACEAE: *Astragalus podolobus*³; ROSACEAE: *Rosa nutkana*¹³⁶, *Rubus bifrons*¹³⁶
133. § *Anthophora (Melea) occidentalis* Cresson, 1869. County records: Chelan^{1,2}, King^{1,2}, Whitman^{1,2}, Yakima^{1,2,106}. Seasonality: Apr², May^{1,2}, Jun^{1,2}, Jul^{1,2} (1982^{1,2}). Collections: SEMC. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
134. *Anthophora (Micranthophora) albata* Cresson, 1876. County records: Benton^{1,2,107}, Chelan¹⁰⁷, Douglas^{2,3}. Seasonality: Jun^{1,2,107}, Aug^{2,107} (1995^{1,2,107}). Collections: BBSL, SEMC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
135. † *Anthophora (Micranthophora) curta* Provancher, 1895. County records: Walla Walla^{1,2,107}. Seasonality: Jun^{1,2,107}, Jul¹⁰⁷ (2012^{1,2,107}). Collections: BBSL. Conservation status: G5 – Secure globally (NatureServe 2024)
136. ‡ *Anthophora (Micranthophora) exigua* Cresson, 1879. County records: Adams⁷, Grant⁷, Kittitas^{1,107}. Seasonality: Jun⁷, Jul^{1,107}, Sep⁷, Aug⁷ (1949^{1,107}). Collections: SEMC, WSUC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
137. † *Anthophora (Micranthophora) peritomae* Cockerell, 1905. County records: Benton⁷. Seasonality: Aug⁷ (1994⁷). Collections: WSUC
138. *Anthophora (Mystacanthophora) urbana* Cresson, 1878. County records: Benton^{1,2,3,71}, Chelan^{1,2}, Douglas^{1,2}, Grant^{1,2}, Jefferson^{1,2}, Kittitas^{1,2,3}, Klickitat^{1,2}, Okanogan^{1,2,3,59}, Walla Walla^{1,2,3,71}, Whitman^{2,3}, Yakima¹²¹. Seasonality: Jun^{1,2,3,121}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2}, Oct^{1,2} (2021^{1,2}). Collections: BBSL, iNaturalist, SEMC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: HYDROPHYLLACEAE: *Phacelia hastata*³; PLANTAGINACEAE: *Penstemon washingtonensis*^{3,59}

139. § *Anthophora (Pyganthophora) crotchii* Cresson, 1878. County records: **Adams**^{1,2,3}, **Benton**^{1,2}, **Franklin**^{1,2,3,118}, **Grant**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3}, **Yakima**^{2,121}. Seasonality: Mar^{1,2}, Apr^{1,2,3,121}, May^{1,2,3,118,121}, Jun^{1,2,3} (2022^{1,2}). Collections: AMNH, BBSL, iNaturalist, SEMC, UCRC. [= *Anthophora washingtoni* Cockerell, 1905]. **Holotype**. USA, Washington, Franklin County, Pasco; 25 May 1896; T Kincaid. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
140. ‡ *Anthophora (Pyganthophora) edwardsii* Cresson, 1878. County records: **Douglas**³, **Garfield**⁴⁶, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3}, **Yakima**^{1,2,3,121}. Seasonality: Apr^{1,2,121}, May^{1,2,3,121}, Jun^{1,2} (1937^{1,2}). Collections: SEMC, UCRC. Conservation status: G4 – Apparently Secure Globally (NatureServe 2024)

Genus *Habropoda* Smith

141. *Habropoda cineraria* (Smith, 1879). County records: **Adams**², **Asotin**², **Benton**^{1,2,3}, **Chelan**^{1,2,3}, **Franklin**^{1,2}, **King**¹, **Kittitas**^{2,3}, **Spokane**^{1,2}, **Whitman**^{1,2,3,8}, **Yakima**^{1,2,3,121}. Seasonality: Mar^{1,2}, Apr^{1,2,3,121}, May^{1,2,3} (2015^{1,2}). Collections: BBSL, INHS, SEMC, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: GROSSULARIACEAE: *Ribes*³, *R. aureum*⁸; LAMIACEAE: *Salvia dorrii*³; ROSACEAE: *Malus domestica*⁸, *Prunus armeniaca*⁸, *Rosa*⁸
142. † *Habropoda cressonii* (Dalla Torre, 1896). County records: **Whitman**². Seasonality: Apr² (1973²). Collections: SEMC
143. †§ *Habropoda miserabilis* (Cresson, 1878). County records: **Jefferson**^{1,2}, **King**^{1,2}, **Okanogan**^{1,2,3}, **Pacific**^{1,2,3}. Seasonality: Apr^{1,2,3}, May^{1,2,3} (2022^{1,2}). Collections: BBSL, iNaturalist, SEMC. Conservation status: G2 – Imperiled globally (NatureServe 2024)
144. *Habropoda morrisoni* (Cresson, 1878). County records: **Benton**^{1,2,3}, **Franklin**^{1,2,118}. Seasonality: Apr^{1,2,3}, May^{1,2} (1995^{1,2}). Collections: BBSL, NMNH, SEMC. [= *Emphoropsis floridana* var. *pascoensis* Cockerell, 1878]. [= *Habropoda floridana* var. *pascoensis* Cockerell, 1878]. **Holotype**. USA, Washington, Franklin County, Pasco; 25 May 1896; Type No. 58047, USNM ENT 00534175. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)

Apinae: Apini

Genus *Apis* Linnaeus

145. * *Apis mellifera* Linnaeus, 1758. County records: **Adams**^{1,2}, **Asotin**^{1,2,3}, **Benton**^{1,2,3,6,71}, **Chelan**^{1,2,3}, **Clallam**^{1,2,3,6}, **Clark**^{1,2,3}, **Columbia**^{1,2}, **Cowlitz**^{1,2,3}, **Douglas**^{1,2}, **Franklin**^{1,2,6}, **Garfield**^{1,2,46}, **Grant**^{1,2,3,6}, **Grays Harbor**^{1,2,6}, **Island**^{1,2}, **Jefferson**^{1,2,6}, **King**^{1,2,3,6}, **Kitsap**^{1,2,6}, **Kittitas**^{1,2}, **Klickitat**^{1,2,3}, **Lewis**^{1,2,3}, **Lincoln**^{1,2}, **Mason**^{1,2,3}, **Okanogan**^{1,2,3}, **Pacific**^{1,2,3,6}, **Pierce**^{1,2,3,6}, **San Juan**^{1,2,3,5,6,124}, **Skagit**^{1,2,3,6,10}, **Skamania**^{1,2,3}, **Snohomish**^{1,2,3,6}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**^{1,2,3,6,130,133}, **Wahkiakum**^{1,2,3}, **Walla Walla**^{1,2,3,6,71}, **Whatcom**^{1,2,3,6,33}, **Whitman**^{1,2,3}, **Yakima**^{1,2,3,6}.

Seasonality: Jan^{1,2}, Feb^{1,2}, Mar^{1,2,3}, Apr^{1,2,3}, May^{1,2,3,5,6,133}, Jun^{1,2,3,5,6,133}, Jul^{1,2,3,6,133}, Aug^{1,2,3,6,133}, Sep^{1,2,3,6}, Oct^{1,2,3,6}, Nov^{1,2,6} (2022^{1,2,6}). Collections: BBSL, EMEC, FMNH iNaturalist, JRYA, NMNH, OSUC, PWRC, SEMC, UNM, WSDA. Floral records: APIACEAE: *Heracleum sphondylium* ssp. *Montanum*⁵; APOCYNACEAE: *Apocynum androsaemifolium*¹³³; ASPARAGACEAE: *Camassia quamash*¹³³, *Triteleia hyacinthina*¹³³; ASTERACEAE: *Balsamorhiza deltoidea*¹³³, *Crepis capillaris*¹³³, *Cirsium arvense*¹³³, *Eriophyllum lanatum*¹³³, *Hypochaeris radicata*¹³³, *Leucanthemum vulgare*¹³³, *Solidago simplex*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³, *Symphoricarpos albus*^{5,133}; ERICACEAE: *Arctostaphylos uva-ursi*¹³³; FABACEAE: *Lupinus albicaulis*¹³³, *L. bicolor*¹³³, *L. lepidus*¹³³, *Trifolium repens*¹³³, *Vicia hirsuta*¹³³, *V. sativa*¹³³; HYPERICACEAE: *Hypericum perforatum*¹³³; LAMIACEAE: *Salvia dorrit*³; PLANTAGINACEAE: *Collinsia grandiflora*¹³³; PLUMBAGINACEAE: *Armeria maritima*¹³³; POLEMONIACEAE: *Gilia capitata*¹³³. Comments: Due to its ubiquitous use in commercial agriculture, it is assumed that *A. mellifera* occurs in Ferry and Pend Oreille counties as well.

Bombini

Genus *Bombus* Latreille

146. †§ *Bombus (Alpinobombus) kirbiellus* Curtis, 1835. County records: **Okanogan**^{1,2,3}. Seasonality: Aug^{1,2,3} (2019^{1,2,3}). Collections: BOMBUS, iNaturalist, NMNH. Conservation status: Data Deficient (Hatfield et al. 2016a); G4 – Apparently Secure globally, S1 – Critically Imperiled in Washington (NatureServe 2024)
147. *Bombus (Bombias) nevadensis* Cresson, 1874. County records: **Adams**^{1,2}, **Asotin**^{1,2,3}, **Benton**^{1,2,3}, **Chelan**^{1,2,3}, **Clark**^{1,2}, **Columbia**^{1,2}, **Douglas**^{1,2}, **Ferry**^{1,2}, **Franklin**^{1,2}, **Garfield**^{1,2,3,46}, **Grant**^{1,2,3}, **Island**^{1,2,3}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2}, **Klickitat**^{1,2,3}, **Lincoln**^{1,2}, **Okanogan**^{1,2}, **Pend Oreille**^{1,2}, **Pierce**^{1,2}, **San Juan**^{1,2,3}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3,8}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2,3}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2,3}, Oct^{1,2} (2021^{1,2}). Collections: AMNH, BBSL, BOMBUS, CNC, EMEC, iNaturalist, INHS, NMNH, PMNH, UCRC, WSUC. Conservation status: Least Concern (Hatfield et al. 2015a); G4 – Apparently Secure globally, S4 – Apparently Secure in Washington (NatureServe 2024). Floral records: ASPARAGACEAE: *Triteleia grandiflora*⁸; ASTERACEAE: *Balsamorhiza sagittata*⁸, *Cirsium vulgare*⁸, *Solidago*⁸; DIPSACACEAE: *Dipsacus fullonum*⁸; FABACEAE: *Astragalus*⁸, *Medicago sativa*⁸, *Trifolium pratense*³, *T. repens*⁸, *Vicia villosa*⁸; HYDROPHYLLACEAE: *Phacelia*⁸; LAMIACEAE: *Agastache urticifolia*⁸; PLANTAGINACEAE: *Penstemon*⁸; ROSACEAE: *Malus domestica*⁸
148. § *Bombus (Bombus) occidentalis* Greene, 1858. County records: **Asotin**^{1,2,3}, **Benton**^{1,2,3}, **Chelan**^{1,2,3}, **Clallam**^{1,2,3,124}, **Columbia**^{1,2,3}, **Cowlitz**^{1,3}, **Douglas**^{1,2}, **Ferry**^{1,2,3}, **Franklin**^{1,2}, **Garfield**^{1,2,3,46}, **Grant**^{1,2,3}, **Grays Harbor**^{1,2,3}, **Island**^{1,2,3,6}, **Jefferson**^{1,2,3,124}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,3}, **Lewis**^{1,2,3},

- Lincoln**^{1,2,3}, **Mason**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Pacific**^{1,2,3}, **Pend Oreille**^{1,2,3}, **Pierce**^{1,2,3}, **San Juan**^{1,2,3}, **Skagit**^{1,2,3}, **Skamania**^{1,2,3}, **Snohomish**^{1,2,3,6}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**^{1,2,3,130}, **Wahkiakum**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whatcom**^{1,2,3,6}, **Whitman**^{1,2,3,8}, **Yakima**^{1,2,3}. Seasonality: Jan², Feb^{1,2}, Mar^{1,2}, Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3,6}, Aug^{1,2,3,6}, Sep^{1,2,3}, Oct^{1,2}, Dec^{1,2} (2021^{1,2,6}). Collections: AMNH, BBSL, BOMBUS, CNC, CSCA, EMEC, FMNH, iNaturalist, INHS, JRYA, LACM, NMNH, PMNH, SEMC, TAMU, UCMC, UCRC, WSDA, WSUC. Conservation status: Vulnerable (National Research Council 2007; Hatfield et al. 2015b); G3 – Vulnerable globally, S2 – Imperiled in Washington (NatureServe 2024). Floral records: ASPARAGACEAE: *Triteleia grandiflora*⁸; ASTERACEAE: *Arnica cordifolia*⁵⁹, *Balsamorhiza sagittata*⁸, *Cirsium vulgare*⁸, *Erigeron speciosus*⁵⁹; FABACEAE: *Lupinus polyphyllus*⁸, *Medicago sativa*⁸, *Trifolium repens*⁸, *Vicia villosa*⁸; HYDROPHYLLACEAE: *Phacelia*⁸; IRIDACEAE: *Sisyrinchium*⁸; ONAGRACEAE: *Chamerion angustifolium* ssp. *Angustifolium*⁸; PLANTAGINACEAE: *Penstemon*⁸; RANUNCULACEAE: *Aconitum columbianum*⁸; ROSACEAE: *Malus domestica*⁸, *Rosa*⁸, *Rubus parviflorus*⁸
- 149. *Bombus (Cullumanobombus) griseocollis* (DeGeer, 1773).** County records: **Adams**^{1,2}, **Asotin**^{1,2}, **Benton**^{1,2,3}, **Chelan**^{1,2,3}, **Clark**^{1,2,3,124}, **Douglas**^{1,2}, **Franklin**^{1,2,3}, **Garfield**^{1,2,46}, **Grant**^{1,2,3}, **Kittitas**^{1,2}, **Klickitat**^{1,2}, **Lincoln**^{1,2}, **Okanogan**^{1,2,3}, **Pierce**³, **Spokane**^{1,2,3}, **Thurston**¹³⁰, **Walla Walla**^{1,2,3,71}, **Whitman**^{1,2,3,6,8}, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, Apr^{1,2,3}, May^{1,2,3,6}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2,3}, Oct^{1,2} (2022^{1,2}). Collections: BBSL, BOMBUS, BugGuide, EMEC, iNaturalist, INHS, LACM, NMNH, UCDC, UCRC, WSDA, WSUC. Conservation status: Least Concern (Hatfield et al. 2015d); G5 – Secure globally, S5 – Secure in Washington (NatureServe 2024). Floral records: ASTERACEAE: *Balsamorhiza sagittata*⁸, *Helianthus annuus*⁸, *Solidago*⁸; FABACEAE: *Lupinus polyphyllus*⁸, *Medicago sativa*⁸, *Vicia villosa*⁸; HYDROPHYLLACEAE: *Phacelia*⁸; IRIDACEAE: *Sisyrinchium*⁸; ONAGRACEAE: *Chamerion angustifolium* ssp. *Angustifolium*⁸; PLANTAGINACEAE: *Penstemon*⁸; ROSACEAE: *Rosa*⁸
- 150. § *Bombus (Cullumanobombus) morrisoni* Cresson, 1878.** County records: **Adams**^{1,2}, **Asotin**^{2,3}, **Benton**^{1,2}, **Chelan**^{1,2,3}, **Franklin**^{1,2}, **Grant**^{1,2,3}, **Grays Harbor**^{1,2}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Pierce**^{1,2,3}, **Spokane**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3}, **Yakima**^{1,2}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2}, Jul^{1,2,3}, Aug^{1,2,3}, Sep¹, Oct¹ (2021^{1,2}). Collections: AMNH, BBSL, iNaturalist, INHS, NMNH, UCMC. Conservation status: Vulnerable (Hatfield et al. 2014a); G3 – Vulnerable globally, S4 – Apparently Secure in Washington (NatureServe 2024). Floral records: FABACEAE: *Trifolium pratense*³; PLANTAGINACEAE: *Penstemon washingtonensis*⁵⁹
- 151. *Bombus (Cullumanobombus) rufocinctus* Cresson, 1863.** County records: **Asotin**^{1,2,3}, **Benton**^{1,2,3}, **Chelan**^{1,2,3}, **Clallam**^{1,2,3}, **Clark**^{1,2,3}, **Columbia**^{1,2,3}, **Douglas**^{1,2}, **Ferry**^{1,2,3}, **Garfield**^{1,2,3}, **Island**¹²⁴, **Jefferson**^{1,2}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2}, **Lewis**^{1,2,4}, **Lincoln**^{1,2,3}, **Mason**^{1,2}, **Okanogan**^{1,2,3,59}, **Pend Oreille**^{1,2,3}, **Pierce**^{1,2,3}, **San Juan**^{1,2,3,5,124}, **Skamania**^{1,2,3}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**¹³³, **Walla Walla**^{1,2},

- Whatcom**^{1,2,3}, **Whitman**^{1,2,3,6,8}, **Yakima**^{1,2}. Seasonality: May^{1,2,3,4,5,133}, Jun^{1,2,3,5,133}, Jul^{1,2,3,5,6}, Aug^{1,2,3,5}, Sep^{1,2,3}, Oct^{1,2,3} (2021^{1,2}). Collections: BBSL, BOMBUS, Bug-Guide, EMEC, FMNH, iNaturalist, INHS, JRYA, LACM, PCYU, PMNH, PWRC, SEMC, UCRC, WSDA, WSUC. Conservation status: Least Concern (Hatfield et al. 2015e); G5 – Secure globally, S4 – Apparently Secure in Washington (NatureServe 2024). Floral records: ASPARAGACEAE: *Triteleia grandiflora*⁸; ASTERACEAE: *Cirsium arvense*³, *Erigeron speciosus*^{3,59}, *Eriophyllum lanatum*¹³³, *Crepis capillaris*⁵, *Jacobaea vulgaris*⁵, *Solidago simplex*¹³³; GERANIACEAE: *Geranium viscosissimum*⁸; HYDROPHYLLACEAE: *Phacelia*^{3,5,8}, *P. hastata*³; IRI-DACEAE: *Sisyrinchium*⁸; ONAGRACEAE: *Chamerion angustifolium* ssp. *Angustifolium*⁸; ROSACEAE: *Rosa nutkana*⁵, *Rubus ulmifolius*⁵, *R. ursinus*⁵
152. § *Bombus (Psithyrus) flavidus* Eversmann, 1852. County records: **Chelan**^{1,2,3}, **Clallam**^{1,2,3}, **Columbia**^{1,2}, **Grays Harbor**^{1,2,3}, **Island**^{2,3}, **Jefferson**^{1,2,3}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2}, **Mason**^{1,2}, **Okanogan**^{1,2,3,59}, **Pacific**^{1,2}, **Pend Oreille**^{1,2}, **Pierce**^{1,2,3}, **San Juan**^{1,2,3,124}, **Skagit**^{1,2,3}, **Skamania**^{1,2,3}, **Snohomish**^{1,2}, **Thurston**^{1,2}, **Whatcom**^{1,2,3,4}, **Whitman**^{1,2,3}, **Yakima**^{1,2}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3,4}, Aug^{1,2,3}, Sep^{1,2,3}, Oct^{1,2} (2021^{1,2}). Collections: BBSL, BugGuide, CNC, LACM, NMNH, PMNH, PWRC, SEMC, TAMU, UCRC, WSDA. [= *Bombus fernaldae* (Franklin, 1911)]. [= *Psithyrus tricolor* Franklin, 1911]. Conservation status: Data Deficient (Hatfield et al. 2016d); G5 – Secure Globally, S3 – Vulnerable in Washington (NatureServe 2024). Floral records: ASTERACEAE: *Centaurea*³, *Cirsium*³; BRASSICACEAE: *Smelowskia calycina*^{3,59}
153. § *Bombus (Psithyrus) insularis* (Smith, 1861). County records: **Asotin**^{1,2,3}, **Chelan**^{1,2,3}, **Clallam**^{1,2}, **Clark**^{1,2}, **Columbia**^{1,2,3}, **Ferry**^{1,2}, **Garfield**^{1,2,3}, **Grays Harbor**^{1,2,3}, **Jefferson**^{1,2,3}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2,3}, **Lewis**^{1,2}, **Lincoln**^{1,2,3}, **Mason**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Pend Oreille**^{1,2,3}, **Pierce**^{1,2,3}, **San Juan**^{1,2,3}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Whatcom**^{1,2,3}, **Whitman**^{1,2,3,8}, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, Mar^{1,2}, Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2,3}, Oct^{1,2} (2020^{1,2}). Collections: AMNH, BBSL, BOMBUS, CNC, EMEC, iNaturalist, INHS, JRYA, LACM, NMNH, NMSU, OSUC, PMNH, SEMC, UCRC, WSUC. Conservation status: Least Concern (Hatfield et al. 2014b); G3 – Vulnerable globally, S5 – Secure in Washington (NatureServe 2024). Floral records: ASTERACEAE: *Achillea millefolium*⁵⁹, *Agoseris glauca* var. *dasycephala*⁵⁹, *Anaphalis margaritacea*⁵⁹, *Cirsium arvense*³, *C. hookerianum*⁵⁹, *C. vulgare*⁵⁹, *Erigeron speciosus*⁵⁹, *Microseris nutans*⁵⁹, *Senecio triangularis*⁵⁹, *Taraxacum officinale*^{3,59}; BRASSICACEAE: *Smelowskia calycina*⁵⁹; CRASSULACEAE: *Sedum lanceolatum*⁵⁹; DIPSACACEAE: *Dipsacus fullonum*⁸; FABACEAE: *Melilotus albus*⁵⁹, *Trifolium repens*³, *Vicia*³; LAMIACEAE: *Agastache urticifolia*⁸; ONAGRACEAE: *Chamerion angustifolium* ssp. *Angustifolium*⁸, *Epilobium*³; PLANTAGINACEAE: *Pentstemon confertus*⁵⁹, *P. washingtonensis*⁵⁹
154. †§ *Bombus (Psithyrus) suckleyi* Greene, 1860. County records: **Chelan**^{1,2}, **Clallam**^{1,2}, **Columbia**^{1,2}, **Douglas**^{1,2}, **Ferry**^{1,2}, **Jefferson**^{1,2,3}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2}, **Lewis**^{1,2,3}, **Mason**^{1,2,3}, **Pend Oreille**^{1,2,3}, **Pierce**^{1,2,3}, **San Juan**^{1,2,3}, **Skamania**^{1,2},

- Snohomish**^{1,2}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**^{1,2,3}, **Walla Walla**^{1,2}, **Whitman**^{1,2,3}, **Yakima**^{1,2}. Seasonality: Jan¹, Apr¹, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2,3} (1998^{1,2}). Collections: AMNH, BBSL, CNC, EMEC, FMNH, INHS, LACM, NMNH, PMNH, SEMC, UCRC, WSUC. Conservation status: Critically Endangered (Hatfield et al. 2015f); G2 – Imperiled globally, S1 – Critically Imperiled in Washington (NatureServe 2024). Floral records: ASPARAGACEAE: *Triteleia grandiflora*⁸; ASTERACEAE: *Senecio*⁸; IRIDACEAE: *Sisyrinchium*⁸; LAMIACEAE: *Agastache urticifolia*⁸; ONAGRACEAE: *Chamerion angustifolium* ssp. *Angustifolium*⁸
155. § ***Bombus (Pyrobombus) caliginosus* (Frison, 1927)**. County records: **Clallam**^{1,2,3,124}, **Clark**^{1,2}, **Cowlitz**^{1,2,3}, Grays Harbor^{1,2,3,6,70}, **Jefferson**^{1,2,3}, **King**^{2,3}, **Kitsap**^{1,2,3}, **Lewis**^{1,2,3}, **Mason**^{1,2,3}, **Pacific**^{1,2,3,6}, **Pierce**^{1,2,3}, **San Juan**^{2,3}, **Skamania**^{1,2,3}, **Thurston**^{1,2,3,6,133}, **Whatcom**^{1,2,3}. Seasonality: May^{1,2,133}, Jun^{1,2,133}, Jul^{1,2,3,6}, Aug^{1,2,3,6}, Sep⁶ (2021⁶). Collections: BBSL, BOMBUS, EMEC, iNaturalist, INHS, JRYA, LACM, NMNH, PMNH, SEMC, WSDA. Conservation status: Vulnerable (Hatfield et al. 2014c); G2 – Imperiled globally, S3 – Vulnerable in Washington (NatureServe 2024). Floral records: ASTERACEAE: *Microseris laciniata*¹³³; CAPRIFOLIACEAE: *Symphoricarpos albus*¹³³; FABACEAE: *Lathyrus odoratus*³, *Lupinus albicaulis*¹³³; LAMIACEAE: *Prunella vulgaris*¹³³
156. ***Bombus (Pyrobombus) centralis* Cresson, 1864**. County records: **Adams**^{1,2,3}, **Asotin**^{1,2,3}, **Benton**^{1,2,3}, **Chelan**^{1,2,3}, **Columbia**^{1,2}, **Douglas**^{1,2}, **Ferry**^{1,2,3}, **Garfield**^{1,2,3,46}, **Grant**^{1,2,3}, **King**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2,3}, **Lincoln**^{1,2}, **Mason**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Pend Oreille**^{1,2}, **San Juan**^{1,2,3}, **Skagit**^{1,2,3}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3,6,8}, **Yakima**^{1,2,3}. Seasonality: Mar^{1,2,3}, Apr^{1,2,3}, May^{1,2,3}, Jun^{1,2,3,6}, Jul^{1,2,3}, Aug^{1,2}, Sep^{1,2}, Oct^{1,2}, Nov^{1,2} (2022^{1,2}). Collections: AMNH, BBSL, BOMBUS, EMEC, iNaturalist, INHS, NMNH, PMNH, PWRC, SEMC, UCRC, WSDA, WSUC. Conservation status: Least Concern (Hatfield et al. 2014d); G5 – Secure globally, S4 – Apparently Secure in Washington (NatureServe 2024). Floral records: ASPARAGACEAE: *Triteleia grandiflora*⁸; ASTERACEAE: *Anaphalis margaritacea*⁸, *Balsamorhiza sagittata*⁸, *Erigeron speciosus*⁵⁹, *Rudbeckia occidentalis*⁸; BORAGINACEAE: *Mertensia paniculata*⁸; CAPRIFOLIACEAE: *Lonicera*³, *Symphoricarpos albus*³; DIPSACACEAE: *Dipsacus ful-lonum*⁸; FABACEAE: *Astragalus sinuatus*³, *Lupinus polyphyllus*⁸, *L. sericeus*^{3,59}, *Trifolium repens*⁸, *Vicia villosa*⁸; GERANIACEAE: *Geranium viscosissimum*⁸; HYDROPHYLLACEAE: *Phacelia hastata*³, *P. leptosepala*⁵⁹; IRIDACEAE: *Sisyrinchium*⁸; LAMIACEAE: *Agastache urticifolia*⁸; ONAGRACEAE: *Chamerion angustifolium* ssp. *angustifolium*⁸, *Clarkia pulchella*³, *Epilobium*³; OROBANCHACEAE: *Orthocarpus tenuifolius*^{3,59}; PLANTAGINACEAE: *Collinsia parviflora*⁸, *Penstemon*⁸, *P. confertus*^{3,59}, *P. washingtonensis*⁵⁹; ROSACEAE: *Malus domestica*⁸, *Rosa*⁸, *R. nutkana* ssp. *nutkana*⁵⁹, *Rubus parviflorus*⁸
157. ***Bombus (Pyrobombus) flavifrons* Cresson, 1864**. County records: **Asotin**^{1,2,3}, **Chelan**^{1,2,3,124}, **Clallam**^{1,2,3,47,124}, **Clark**^{1,2,3}, **Columbia**^{1,2,3}, **Cowlitz**^{1,2}, **Ferry**^{1,2}, **Garfield**^{1,2}, Grays Harbor^{1,2,3,6,70}, **Island**^{1,2,3,124}, **Jefferson**^{1,2,3,47,124}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2}, **Lewis**^{1,2,3,47}, **Lincoln**^{1,2}, **Mason**^{1,2,3}, **Okanogan**^{1,2,3,59},

- Pacific**^{1,2}, **Pend Oreille**^{1,2}, **Pierce**^{1,2,3,47}, **San Juan**^{1,2,3,5,6,47,124,136}, **Skagit**^{1,2,3,6,10,47,70,124}, **Skamania**^{1,2,3}, **Snohomish**^{1,2,3}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**^{1,2,3,6,130,133}, **Wahkiakum**^{1,2}, **Walla Walla**^{1,2,3}, **Whatcom**^{1,2,3,6,47,124}, **Whitman**^{1,2,3,8}, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, Feb^{1,2}, Mar^{1,2}, Apr^{1,2,3,5}, May^{1,2,3,5,133}, Jun^{1,2,3,6,133}, Jul^{1,2,3,5,6,47,133}, Aug^{1,2,3,6,47}, Sep^{1,2,3}, Nov^{1,2} (2022^{1,2}). Collections: AMNH, BBSL, BOMBUS, CNC, EMEC, iNaturalist, INHS, JRYA, LACM, NMNH, OSUC, PMNH, PWRC, SEMC, UCRC, WSDA, WSUC. Conservation status: Least Concern (Hatfield et al. 2015g); G5 – Secure globally, S5 – Secure in Washington (NatureServe 2024). Floral records: ASTERACEAE: *Balsamorhiza deltoidea*¹³³, *Cirsium arvense*^{8,133}, *Eriogon speciosus*⁵⁹, *Eriophyllum lanatum*¹³³, *Helianthus annuus*⁸, *Microseris nutans*⁵⁹, *Solidago simplex*¹³³, *Taraxacum officinale*^{5,136}; BORAGINACEAE: *Mertensia*³; CAMPANULACEAE: *Campanula rotundifolia*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³, *Symphoricarpos albus*^{5,59,133,136}; CARYOPHYLLACEAE: *Cerastium arvense*¹³³; DIPSACACEAE: *Dipsacus fullonum*⁸; ERICACEAE: *Gaultheria shallon*³, *Rhododendron*⁵; FABACEAE: *Astragalus miser* var. *serotinus*⁵⁹, *Lathyrus japonicus*¹³⁶, *L. nevadensis*⁵, *L. odoratus*³, *Lupinus albicaulis*¹³³, *L. lepidus*¹³³, *L. littoralis*¹³⁶, *Trifolium pratense*¹³³, *T. repens*^{3,5,59}, *Vicia americana*¹³³, *V. sativa*¹³³, *V. villosa*⁸; GERANIACEAE: *Geranium dissectum*¹³³; GROSSULARIACEAE: *Ribes divaricatum*¹³⁶; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹; HYPERICACEAE: *Hypericum perforatum*¹³³; IRIDACEAE: *Sisyrinchium*⁸; LAMIACEAE: *Agastache urticifolia*⁸, *Prunella vulgaris*¹³³; ONAGRACEAE: *Chamerion angustifolium* ssp. *angustifolium*^{3,8}; OROBRANCHACEAE: *Castilleja*⁸, *C. miniata*⁵⁹, *Parentucellia viscosa*¹³³; PLANTAGINACEAE: *Collinsia grandiflora*¹³³, *Penstemon*⁸, *P. confertus*⁵⁹, *P. washingtonensis*⁵⁹; POLEMONIACEAE: *Gilia capitata*¹³³; RANUNCULACEAE: *Delphinium nuttallianum*^{59,133}; ROSACEAE: *Potentilla gracilis*¹³³, *Rubus bifrons*¹³⁶
158. § *Bombus (Pyrobombus) frigidus* Smith, 1854. County records: **Chelan**^{1,2,3}, **Clallam**^{1,2}, **Cowlitz**^{1,2}, **Jefferson**^{1,2}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Okanogan**^{1,2,3}, **Thurston**^{1,2}, **Whatcom**^{1,2}, **Yakima**^{1,2}. Seasonality: Jun^{1,2}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2,3} (2010^{1,2}). Collections: BBSL, CNC, NMNH, SEMC. Conservation status: Least Concern (Hatfield et al. 2014e); G5 – Secure globally, S2 – Imperiled in Washington (NatureServe 2024). Floral records: CAPRIFOLIACEAE: *Symphoricarpos albus*³; FABACEAE: *Lupinus*³; ONAGRACEAE: *Epilobium*³
159. *Bombus (Pyrobombus) huntii* Greene, 1860. County records: **Adams**^{1,2,3}, **Asotin**^{1,2}, **Benton**^{1,2,3}, **Chelan**^{1,2,3}, **Douglas**^{1,2,3}, **Ferry**^{1,2,3}, **Garfield**⁴⁶, **Grant**^{1,2,3}, **King**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2,3}, **Lincoln**^{1,2,3}, **Okanogan**^{1,2,3}, **Pierce**^{1,2,3}, **Spokane**^{1,2,3}, **Stevens**^{1,2}, **Thurston**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3}, **Yakima**^{1,2,3}. Seasonality: Mar^{1,2}, Apr^{1,2,3}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2}, Oct^{1,2,3}, Nov^{1,2} (2022^{1,2}). Collections: AMNH, BOMBUS, BugGuide, EMEC, iNaturalist, INHS, LACM, NMNH, SEMC, UCRC. Conservation status: Least Concern (Hatfield et al. 2015h); G5 – Secure globally, S4 – Apparently Secure in Washington (NatureServe 2024). Floral records: CAPRIFOLIACEAE: *Symphoricarpos albus*³
160. * *Bombus (Pyrobombus) impatiens* Cresson, 1863. County records: **King**^{1,2}, **Skagit**^{1,2}, **Whatcom**^{1,2,3,6,33}. Seasonality: Apr^{1,2,33}, May^{1,2,6,33}, Jul^{1,2,6}, Aug^{1,2,6,33},

Sep^{1,6}, Oct^{1,2,3,6}, Dec^{1,2} (2022^{1,2}). Collections: BOMBUS, BugGuide, iNaturalist, WSDA. Conservation status: Least Concern (Hatfield et al. 2014f); G5 – Secure globally (NatureServe 2024)

161. § *Bombus (Pyrobombus) lapponicus sylvicola* Kirby, 1837. County records: **Chelan**^{1,2,3,124}, **Clallam**^{1,2,3,47,69,124}, **Jefferson**^{1,2,3,47,69,124}, **King**^{1,2,3}, **Kittitas**^{1,2}, **Lewis**^{1,2,47,124}, **Lincoln**^{1,2}, **Mason**^{1,2,3}, **Okanogan**^{1,2}, **Pierce**^{1,2,3,47,124}, **San Juan**^{1,2,3,124}, **Skagit**^{1,2,3,47,124}, **Whatcom**^{1,2,3,47}, **Yakima**^{1,2}, Seasonality: Jun^{1,2}, Jul^{1,2,3,47}, Aug^{1,2,3,47}, Sep^{1,2,3} (2018^{1,2}). Collections: BBSL, BOMBUS, iNaturalist, JRYA, LACM, NMNH, OSUC, PMNH, PWRC, UCDC. Conservation status: Least Concern (Hatfield et al. 2015j); G5 – Secure globally, S3 – Vulnerable in Washington (NatureServe 2024)
162. *Bombus (Pyrobombus) melanopygus* Nylander, 1848. County records: **Chelan**^{1,2,3,124}, **Clallam**^{1,2,3,47,124}, **Clark**^{1,2,3}, **Cowlitz**^{1,2}, **Douglas**^{1,2}, **Ferry**^{1,2}, **Franklin**^{1,2}, **Grays Harbor**^{1,2,3}, **Island**^{1,2}, **Jefferson**^{1,2,3,47,124}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2}, **Lewis**^{1,2,3}, **Mason**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Pacific**^{1,2,3}, **Pend Oreille**^{1,2,3}, **Pierce**^{1,2,3,47,124}, **San Juan**^{1,2,3,5,6,22,47,124,136}, **Skagit**^{1,2,3,10,124}, **Skamania**^{1,2,3}, **Snohomish**^{1,2,3,6}, **Spokane**^{1,2,3}, **Thurston**^{1,2,3,130,133}, **Walla Walla**^{1,2,3}, **Whatcom**^{1,2,3,6,33,47,124}, **Whitman**^{1,2,3}, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, Feb^{1,2}, Mar^{1,2}, Apr^{1,2,3,5,133}, May^{1,2,3,5,33,133}, Jun^{1,2,3,5,133}, Jul^{1,2,3,6,47}, Aug^{1,2,3,6,47}, Sep^{1,2}, Oct^{1,2}, Nov^{1,2}, Dec^{1,2} (2022^{1,2}). Collections: AMNH, BBSL, BOMBUS, CNC, EMEC, FMNH, iNaturalist, INHS, LACM, NMNH, OSUC, PMNH, PWRC, SEMC, UCDC, UCRC, WSDA. Conservation status: Least Concern (Hatfield et al. 2014g); G5 – Secure globally, S4 – Apparently Secure in Washington (NatureServe 2024). Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Achillea millefolium*^{59,133}, *Anaphalis margaritacea*⁵⁹, *Erigeron speciosus*⁵⁹, *Grindelia integrifolia*⁵, *Hypochaeris radicata*¹³³, *Microseris nutans*⁵⁹, *Senecio integerrimus*^{3,59}, *Solidago simplex*¹³³, *Taraxacum officinale*^{5,59}; BORAGINACEAE: *Myosotis laxa*⁵⁹; CAPRIFOLIACEAE: *Symphoricarpos albus*¹³⁶; CARYOPHYLLACEAE: *Eremogone capillaris* var. *capillaris*⁵⁹; CUCURBITACEAE: *Marah oregana*⁵; ERICACEAE: *Arctostaphylos uva-ursi*¹³³, *Heather*⁵, *Rhododendron*⁵; FABACEAE: *Lupinus albicaulis*¹³³, *L. lepidus*¹³³, *Trifolium repens*^{3,59}, *Vicia sativa*¹³³; GROSSULARIACEAE: *Ribes divaricatum*⁵; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹; OROBRANCHACEAE: *Castilleja miniata*⁵⁹, *Parentucellia viscosa*¹³³; PLANTAGINACEAE: *Collinsia grandiflora*¹³³, *Penstemon confertus*⁵⁹; ROSACEAE: *Rubus*^{3,59}; VALERIANACEAE: *Plectritis congesta*⁵; VIOLACEAE: *Viola adunca*¹³³
163. *Bombus (Pyrobombus) mixtus* Cresson, 1879. County records: **Asotin**^{1,2,3}, **Chelan**^{1,2,3,124}, **Clallam**^{1,2,3,47,124}, **Clark**^{1,2,3}, **Columbia**^{1,2,3}, **Cowlitz**^{1,2,3}, **Douglas**^{1,2}, **Ferry**^{1,2,3}, **Garfield**^{1,2}, **Grays Harbor**^{1,2,3,6,70}, **Island**^{1,2,3,6}, **Jefferson**^{1,2,3,47,124}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2,3}, **Lewis**^{1,2,3,124}, **Mason**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Pacific**^{1,2,3}, **Pend Oreille**^{1,2,3}, **Pierce**^{1,2,3,6,47}, **San Juan**^{1,2,3,5,6,22,47,124,136}, **Skagit**^{1,2,3,6,10,47,70,124}, **Skamania**^{1,2}, **Snohomish**^{1,2,3,6}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**^{1,2,3,6,130,133}, **Wahkiakum**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whatcom**^{1,2,3,6,47,124}, **Whitman**^{1,2,3,8}, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, Feb^{1,2}, Mar^{1,2}, Apr^{1,2,5,133}, May^{1,2,3,5,133},

Jun^{1,2,3,5,6,133}, Jul^{1,2,3,5,6,47,133}, Aug^{1,2,3,5,6,47}, Sep^{1,2,6}, Oct^{1,2} (2022^{1,2}). Collections: AMNH, BBSL, BOMBUS, CNC, CSCA, EMEC, iNaturalist, INHS, JRYA, LACM, NMNH, OSUC, PMNH, PWRC, SEMC, UCRC, WFBM, WSDA, WSUC. Conservation status: Least Concern (Hatfield et al. 2014h); G5 – Secure globally, S5 – Secure in Washington (NatureServe 2024). Floral records: APOCYNACEAE: *Apocynum androsaemifolium*¹³³; ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Achillea millefolium*⁵⁹, *Arnica cordifolia*^{8,59}, *Balsamorhiza deltoidea*¹³³, *Cirsium arvense*¹³³, *Crepis capillaris*¹³³, *Erigeron speciosus*⁵⁹, *Eriophyllum lanatum*¹³³, *Hypochaeris radicata*¹³³, *Jacobaea vulgaris*⁵, *Leucanthemum vulgare*¹³³, *Microseris laciniata*¹³³, *Rudbeckia occidentalis*⁸, *Senecio jacobaea*¹³³, *S. triangularis*⁵⁹, *Solidago simplex*¹³³, *Taraxacum officinale*^{5,59,136}; BORAGINACEAE: *Mertensia*³, *M. paniculata*⁸; BRASSICACEAE: *Brassica rapa*⁵, *Cakile maritima*¹³⁶; CAPRIFOLIACEAE: *Lonicera involucrata*^{3,59}, *Plectritis congesta*¹³³, *Symphoricarpos albus*^{133,136}; ERICACEAE: *Arctostaphylos uva-ursi*¹³³, *Phyllodoce empetrifomis*⁵⁹; FABACEAE: *Astragalus miser* var. *serotinus*⁵⁹, *Lupinus*⁵⁹, *L. albicaulis*¹³³, *L. bicolor*¹³³, *L. lepidus*¹³³, *L. littoralis*¹³⁶, *L. polyphyllus*⁸, *Vicia hirsuta*¹³³, *V. sativa*¹³³; GERANIACEAE: *Geranium dissectum*¹³³, *G. molle*^{5,136}; GROSSULARIACEAE: *Ribes*³, *R. divaricatum*^{5,136}; HYDROPHYLLACEAE: *Phacelia*⁸, *P. leptosepala*⁵⁹; HYPERICACEAE: *Hypericum perforatum*¹³³; IRIDACEAE: *Sisyrinchium*⁸; LAMIACEAE: *Prunella vulgaris*¹³³; ONAGRACEAE: *Chamerion angustifolium* ssp. *angustifolium*⁸, *Clarkia amoena*¹³³; OROBRANCHACEAE: *Pedicularis bracteosa* var. *latifolia*⁵⁹; PAPAVERACEAE: *Eschscholzia californica*⁵; PLANTAGINACEAE: *Collinsia grandiflora*¹³³, *C. parviflora*⁸, *Penstemon confertus*⁵⁹, *P. washingtonensis*⁵⁹; POLEMONIACEAE: *Gilia capitata*¹³³; RANUNCULACEAE: *Delphinium nuttallianum*⁵⁹; ROSACEAE: *Potentilla gracilis*¹³³, *Rosa nutkana* ssp. *nutkana*⁵⁹, *Rubus*⁵⁹, *R. bifrons*¹³⁶, *R. ulmifolius*⁵, *R. parviflorus*⁵⁹, *R. ursinus*⁵; VALERIANACEAE: *Plectritis congesta*⁵

164. *Bombus (Pyrobombus) sitkensis* Nylander, 1848. County records: **Chelan**^{1,2,3}, **Clallam**^{1,2,3}, **Clark**^{1,2,3}, **Columbia**^{1,2,3}, **Cowlitz**^{1,2}, **Grant**³, **Grays Harbor**^{1,2,3}, **Island**^{1,2,3}, **Jefferson**^{1,2,3}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2}, **Lewis**^{1,2,3}, **Mason**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Pacific**^{1,2,3}, **Pend Oreille**^{1,2}, **Pierce**^{1,2,3,6}, **San Juan**^{1,2,3,6,22,124,136}, **Skagit**^{1,2,3,6,10}, **Skamania**^{1,2}, **Snohomish**^{1,2,3}, **Spokane**^{1,2}, **Thurston**^{1,2,3,6,130,133}, **Whatcom**^{1,2,3,6}, **Whitman**^{1,2,3}, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, Mar^{1,2}, Apr^{1,2}, May^{1,2,3,133}, Jun^{1,2,3,6,133}, Jul^{1,2,3,6,133}, Aug^{1,2,3,6}, Sep^{1,2,6}, Oct^{1,2} (2022^{1,2}). Collections: AMNH, BBSL, BOMBUS, CNC, CSCA, EMEC, FMNH, iNaturalist, INHS, JRYA, LACM, NMNH, OSUC, PMNH, PWRC, SEMC, UCDC, UCRC, WSDA. Conservation status: Least Concern (Hatfield et al. 2015i); G4 – Apparently Secure globally, S4 – Apparently Secure in Washington (NatureServe 2024). Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Balsamorhiza deltoidea*¹³³, *Cirsium arvense*¹³³, *Hypochaeris radicata*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³, *Symphoricarpos albus*^{133,136}; FABACEAE: *Lathyrus*³, *Lupinus*³, *L. albicaulis*¹³³, *Vicia hirsuta*¹³⁶; GROSSULARIACEAE: *Ribes divaricatum*¹³⁶; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹; LAMIACEAE: *Agastache*³,

- Prunella vulgaris*¹³³; OROBANCHACEAE: *Parentucellia viscosa*¹³³; PRIMULACEAE: *Dodecatheon hendersonii*¹³³; RANUNCULACEAE: *Delphinium nuttallii*¹³³
165. § *Bombus (Pyrobombus) vagans* Smith, 1854. County records: **Chelan**^{1,2}, **Ferry**^{1,2}, **Lincoln**^{1,2}, **Okanogan**^{1,2,3}, **Pend Oreille**^{1,2,3}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**¹³³, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3}. Seasonality: Apr^{1,2,3}, May^{1,2,3,133}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2}, Sep^{1,2}, Oct^{1,2} (2021^{1,2}). Collections: BBSL, BOMBUS, BugGuide, EMEC, iNaturalist, UCRC, WSUC. Conservation status: Least Concern (Hatfield et al. 2015k); G4 – Apparently Secure globally, S2 – Imperiled in Washington (NatureServe 2024). Floral records: CAPRIFOLIACEAE: *Plectritis congesta*¹³³; IRIDACEAE: *Sisyrinchium*⁸
166. *Bombus (Pyrobombus) vancouverensis* Cresson, 1879. County records: **Asotin**^{1,2,3}, **Benton**^{1,2,3}, **Chelan**^{1,2,3,124}, **Clallam**^{1,2,3,124}, **Columbia**^{1,2,3}, **Douglas**^{1,2,3}, **Ferry**^{1,2,3}, **Garfield**^{1,2,3,46}, **Grant**^{1,2,3}, **Jefferson**^{1,2,3,124}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2,3}, **Lewis**^{1,2,124}, **Lincoln**^{1,2,3}, **Mason**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Pend Oreille**^{1,2,3}, **Pierce**^{1,2,3,124}, **San Juan**^{1,2,3,5,6,22,124,136}, **Skagit**¹²⁴, **Skamania**^{1,2,3}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whatcom**^{1,2,3,124}, **Whitman**^{1,2,3,8}, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, Mar^{1,2}, Apr^{1,2,3}, May^{1,2,3,5}, Jun^{1,2,3}, Jul^{1,2,3,5,6}, Aug^{1,2,3,5,6}, Sep^{1,2}, Oct^{1,2} (2019^{1,2,6}). Collections: AMNH, BBSL, BOMBUS, CNC, CSCA, EMEC, FMNH, iNaturalist, INHS, JRYA, LACM, NMNH, PMNH, PWRC, OSUC, SEMC, UCRC, WSDA, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Achillea millefolium*⁵⁹, *Agoseris glauca* var. *dasycephala*⁵⁹, *Anaphalis margaritacea*^{8,59}, *Arnica cordifolia*⁵⁹, *A. sororia*⁵⁹, *Cirsium arvense*⁸, *Erigeron speciosus*⁵⁹, *Hypochaeris radicata*¹³⁶, *Jacobaea vulgaris*⁵, *Microseris nutans*⁵⁹, *Rudbeckia occidentalis*⁸, *Senecio integerrimus*⁵⁹, *S. triangularis*⁵⁹, *Taraxacum officinale*^{59,136}; BRASSICACEAE: *Sisymbrium altissimum*⁵⁹; CAPRIFOLIACEAE: *Symphoricarpos albus*^{59,136}; CUCURBITACEAE: *Marah oregana*⁵; FABACEAE: *Astragalus miser* var. *serotinus*⁵⁹, *Lupinus*⁵⁹, *L. littoralis*¹³⁶, *L. polyphyllus*⁸, *L. sericeus*⁵⁹, *Melilotus albus*⁵⁹, *Trifolium pratense*⁵⁹, *T. repens*⁵⁹, *Vicia villosa*⁸; GERANIACEAE: *Geranium viscosissimum* var. *viscosissimum*⁵⁹; GROSSULARIACEAE: *Ribes divaricatum*¹³⁶; HYDROPHYLLACEAE: *Phacelia*⁸, *P. leptosepala*⁵⁹; IRIDACEAE: *Sisyrinchium*⁸; ONAGRACEAE: *Chamerion angustifolium* ssp. *angustifolium*^{8,59}; OROBANCHACEAE: *Orthocarpus tenuifolius*⁵⁹; PLANTAGINACEAE: *Collinsia parviflora*⁸, *Penstemon*⁸, *P. confertus*⁵⁹, *P. washingtonensis*⁵⁹; POLEMONIACEAE: *Polemonium pulcherrimum*⁵⁹; ROSACEAE: *Potentilla gracilis*⁵⁹, *Rubus bifrons*¹³⁶, *L. parviflorus*⁵⁹
- 166a. *Bombus (Pyrobombus) vancouverensis nearcticus* Handlirsch, 1888. County records: **Chelan**^{1,2}, **Kittitas**^{1,2}, **Klickitat**^{1,2}, **Lewis**⁶⁸, **Okanogan**^{1,2}, **Pend Oreille**^{1,2}, **Pierce**^{1,2,68}, **Skamania**^{1,2}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Whatcom**^{1,2}, **Whitman**^{1,2}, **Yakima**^{1,2}. Seasonality: Apr^{1,2}, May^{1,2}, Jun^{1,2}, Jul^{1,2}, Aug^{1,2}, Sep^{1,2}, Oct^{1,2} (2022^{1,2}). Collections: iNaturalist
- 166b. *Bombus (Pyrobombus) vancouverensis vancouverensis* Cresson, 1879. County records: **San Juan**^{1,2,68}, **Skagit**^{1,2}. Seasonality: Mar^{1,2}, Apr^{1,2,3}, May^{1,2,3}, Aug^{1,2} (2020^{1,2}). Collections: iNaturalist
167. § *Bombus (Pyrobombus) vandykei* (Frison, 1927). County records: **Chelan**^{1,2,3}, **Clallam**^{3,124}, **Douglas**^{1,2}, **Grays Harbor**^{1,2}, **Jefferson**^{1,69,124}, **King**^{1,2,3}, **Kittitas**^{1,2,3},

- Klickitat**^{1,2}, **Mason**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Pierce**^{1,2,3}, **San Juan**¹²⁴, **Snohomish**^{1,2,3}, **Thurston**^{1,2,3}, **Whatcom**^{1,2}, **Whitman**^{1,2,3}, **Yakima**^{1,2,3,105}. Seasonality: Mar^{1,2}, Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2} (2021^{1,2}). Collections: AMNH, BBSL, BOMBUS, CAS, EMEC, iNaturalist, INHS, JRYA, LACM, NMNH, PMNH, UCRC. [= *Bombus flavifrons* var. *vandykei* Frison, 1927]. **Holotype**. USA, Washington, Yakima County, Mt. Adams, Yakima Indian Forest Reservation; CAS #2437. [= *Pyrobombus cascadenis* Milliron, 1970]. Conservation status: Least Concern (Hatfield et al. 2015l); G4 – Apparently Secure globally, S3 – Vulnerable in Washington (NatureServe 2024). Floral records: FABACEAE: *Lupinus*^{3,59}; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹
- 168. *Bombus (Pyrobombus) vosnesenskii* Radoszkowski, 1862.** County records: **Benton**^{1,2,3}, **Chelan**^{1,2}, **Clallam**^{1,2,3,6,124}, **Clark**^{1,2,3,124}, **Cowlitz**^{1,2,3}, **Douglas**^{1,2}, **Garfield**^{1,2,3}, **Grays Harbor**^{1,2}, **Island**^{1,2,3,124}, **Jefferson**^{1,2,3,6,124}, **King**^{1,2,3,6}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2}, **Klickitat**^{1,2}, **Lewis**^{1,2,4}, **Lincoln**^{1,2}, **Mason**^{1,2,3}, **Okanogan**^{1,2}, **Pacific**^{1,2,3,6}, **Pierce**^{1,2,3,6}, **San Juan**^{1,2,3,5,6,136}, **Skagit**^{1,2,3,6,10}, **Skamania**^{1,2,3}, **Snohomish**^{1,2,6}, **Stevens**^{1,2}, **Thurston**^{1,2,3,6,130,133}, **Wahkiakum**^{1,2}, **Walla Walla**^{1,2,3}, **Whatcom**^{1,2,6,33}, **Whitman**^{1,2}, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, Feb^{1,2}, Mar^{1,2}, Apr^{1,2,5,33,133}, May^{1,2,5,33,133}, Jun^{1,2,3,5,133}, Jul^{1,2,3,5,6,133}, Aug^{1,2,6,33}, Sep^{1,2,6}, Oct^{1,2,3}, Nov^{1,2}, Dec^{1,2} (2022^{1,2}). Collections: AMNH, BBSL, BOMBUS, BugGuide, CNC, CSCA, EMEC, FMNH, iNaturalist, INHS, LACM, NMNH, PCYU, PMNH, PWRC, SEMC, TAMU, UCRC, WSDA. Conservation status: Least Concern (Hatfield et al. 2015m); G5 – Secure globally, S5 – Secure in Washington (NatureServe 2024). Floral records: ASPARAGACEAE: *Brodiaea coronaria*¹³³, *Camassia quamash*¹³³; ASTERACEAE: *Balsamorhiza deltoidea*¹³³, *Cirsium arvense*¹³³, *Crepis capillaris*¹³³, *Erigeron speciosus*¹³³, *Eriophyllum lanatum*¹³³, *Grindelia integrifolia*⁵, *Hypochaeris radicata*^{5,133}, *Leucanthemum vulgare*¹³³, *Microseris laciniata*¹³³, *Senecio jacobaea*¹³³, *Solidago missouriensis*¹³³, *S. simplex*¹³³, *Taraxacum officinale*¹³³; BRASSICACEAE: *Lepidium campestre*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³, *Symphoricarpos albus*^{133,136}; CARYOPHYLLACEAE: *Cerastrium arvense*¹³³; ERICACEAE: *Arctostaphylos uva-ursi*¹³³; FABACEAE: *Lathyrus japonicus*¹³⁶, *Lupinus albicaulis*¹³³, *L. bicolor*¹³³, *L. lepidus*¹³³, *L. littoralis*¹³⁶, *Trifolium pratense*¹³³, *T. repens*¹³³, *Vicia americana*¹³³, *V. hirsuta*¹³³, *V. sativa*^{133,136}; GROSSULARIACEAE: *Ribes*⁵; HYPERICACEAE: *Hypericum perforatum*¹³³; LAMIACEAE: *Prunella vulgaris*¹³³; OROBANCHACEAE: *Castilleja hispida*¹³³, *C. levisecta*¹³³, *Pentstemon viscosa*¹³³; PAPAVERACEAE: *Eschscholzia californica*⁵; PLANTAGINACEAE: *Collinsia grandiflora*¹³³; PLUMBAGINACEAE: *Armeria maritima*¹³³; POLEMONIACEAE: *Gilia capitata*¹³³; PRIMULACEAE: *Dodecatheon hendersonii*¹³³; RANUNCULACEAE: *Delphinium nuttallii*¹³³; ROSACEAE: *Potentilla gracilis*¹³³, *Rubus bifrons*¹³⁶; SAPINACEAE: *Acer macrophyllum*⁵
- 169. § *Bombus (Subterraneobombus) appositus* Cresson, 1879.** County records: **Asotin**^{1,2,3}, **Chelan**^{1,2,3}, **Clallam**^{1,2,3,124}, **Clark**^{1,2,124}, **Columbia**^{1,2,3}, **Ferry**^{1,2}, **Franklin**^{1,2,3}, **Garfield**^{1,2,3}, **Grant**³, **King**^{1,2}, **Kitsap**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2,3}, **Lincoln**^{1,2}, **Mason**³, **Okanogan**^{1,2,3,59}, **Pend Oreille**^{1,2,3}, **San Juan**^{1,2,3,5}, **Skagit**³, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whatcom**^{1,2,3},

Whitman^{1,2,3,6,8}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2,3}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3,5,6}, Aug^{1,2,3,6}, Sep^{1,2}, Oct^{1,2}, Nov^{2,3} (2022^{1,2}). Collections: BBSL, BOMBUS, BugGuide, CNC, CSCA, FMNH, iNaturalist, INHS, JRYA, LACM, NMNH, PMNH, TAMU, UCRC, WSDA, WSUC. Conservation status: Least Concern (Hatfield et al. 2015n); G3 – Vulnerable globally, S4 – Apparently Secure in Washington (NatureServe 2024). Floral records: ASPARAGACEAE: *Triteleia grandiflora*⁸; ASTERACEAE: *Balsamorhiza sagittata*⁸, *Cirsium*³, *C. arvense*⁵; BORAGINACEAE: *Myosotis laxa*⁵⁹; FABACEAE: *Lupinus*³, *Medicago sativa*³, *Vicia villosa*⁸; HYDROPHYLLACEAE: *Phacelia*⁸; LAMIACEAE: *Agastache urticifolia*⁸; OROBANCHACEAE: *Orthocarpus tenuifolius*^{3,59}; PLANTAGINACEAE: *Penstemon confertus*^{3,59}, *P. washingtonensis*^{3,59}

170. § *Bombus (Thoracobombus) fervidus* (Fabricius, 1798) species complex. County records: Adams^{1,2,3}, Asotin^{1,2,3}, Benton^{1,2,3,71}, Chelan^{1,2,3}, Clallam^{1,2,3}, Clark^{1,2}, Columbia^{1,2}, Cowlitz^{1,2,3}, Douglas^{1,2}, Ferry^{1,2}, Franklin^{1,2,3}, Garfield^{1,2,46}, Grant^{1,2,3}, Grays Harbor^{1,2,6,70}, Island^{1,2,3}, Jefferson^{1,2,3}, King^{1,2,3}, Kitsap^{1,2,3}, Kittitas^{1,2,3}, Klickitat^{1,2,3}, Lewis^{1,2,3}, Lincoln^{1,2}, Mason^{1,2,3}, Okanogan^{1,2,3,59}, Pacific^{1,2,3,6}, Pend Oreille^{1,2}, Pierce^{1,2,3,6}, San Juan^{1,2,3}, Skagit^{1,2,10,70}, Skamania^{1,2}, Snohomish^{1,2,3}, Spokane^{1,2,3}, Stevens^{1,2}, Thurston^{1,2,3,6,133}, Wahkiakum^{1,2}, Walla Walla^{1,2,3}, Whatcom^{1,2,33}, Whitman^{1,2,3,6,8}, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, Mar^{1,2}, Apr^{1,2,3,133}, May^{1,2,3,133}, Jun^{1,2,3,133}, Jul^{1,2,3,6}, Aug^{1,2,3,6,33}, Sep^{1,2,3,6}, Oct^{1,2,3}, Nov^{1,2}, Dec^{1,2} (2022^{1,2}). Collections: AMNH, BBSL, BOMBUS, BugGuide, CNC, EMEC, FMNH, iNaturalist, INHS, LACM, NMNH, PMNH, OSUC, SEMC, TAMU, UCDC, UCRC, WSDA, WSUC. Conservation status: Vulnerable (Hatfield et al. 2015p); G3 – Vulnerable globally, S4 – Apparently Secure in Washington (NatureServe 2024). Floral records: ASPARAGACEAE: *Camassia quamash*¹³³, *Triteleia grandiflora*⁸; ASTERACEAE: *Anaphalis margaritacea*⁸, *Balsamorhiza deltoidea*¹³³, *B. sagittata*⁸, *Cirsium vulgare*⁸, *Hypochaeris radicata*¹³³, *Leucanthemum vulgare*¹³³, *Microseris laciniata*¹³³, *Rudbeckia occidentalis*⁸, *Taraxacum officinale*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³, *Symphoricarpos albus*¹³³; CONVULVACEAE: *Ipomoea*³; DIPSACACEAE: *Dipsacus fullonum*⁸; FABACEAE: *Astragalus sinuatus*³, *Lathyrus odoratus*³, *Lupinus albicaulis*¹³³, *L. polyphyllus*⁸, *Medicago sativa*⁸, *Trifolium pratense*¹³³, *T. repens*^{3,59,133}, *Vicia americana*¹³³, *V. sativa*¹³³, *V. villosa*⁸; GERANIACEAE: *Geranium viscosissimum*⁸; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹; HYPERICACEAE: *Hypericum perforatum*¹³³; IRIDACEAE: *Sisyrinchium*⁸; LAMIACEAE: *Agastache urticifolia*⁸, *Prunella vulgaris*¹³³; ONAGRACEAE: *Chamerion angustifolium* ssp. *angustifolium*⁸; OROBRANCHACEAE: *Castilleja hispida*¹³³, *C. levisecta*¹³³, *C. miniata*⁵⁹, *Parentucellia viscosa*¹³³; PLANTAGINACEAE: *Collinsia grandiflora*¹³³, *Penstemon washingtonensis*⁵⁹; RANUNCULACEAE: *Delphinium nuttallii*¹³³; ROSACEAE: *Malus domestica*⁸, *Rosa*⁸. Comments: *Bombus fervidus* and *B. californicus* are morphologically identical, but molecular analysis by Koch et al. (2018) supports the existence of two distinct lineages. However, based on the original species description, it is unclear which name is attributed to which species, or if these names represent two variations of the same species (Koch et al. 2018). Records of both species are presented here as a single species complex.

Eucerinae: Emphorini

Genus *Diadasia* Patton

171. *Diadasia (Coquillettapis) diminuta* (Cresson, 1878). County records: Asotin³⁶, Benton^{1,2,3}, Chelan^{1,2,3}, Walla Walla^{1,2}, Whatcom³, Whitman³⁶, Yakima⁷. Seasonality: May^{1,2,3}, Jun^{1,2,3,7}, Jul^{1,2,7}, Aug³ (2022^{1,2}). Collections: BBSL, iNaturalist, JRYA, UCRC, WSUC
172. † *Diadasia (Coquillettapis) lutzi* Cockerell, 1924. County records: Benton⁷, Yakima⁷. Seasonality: May⁷ (2015⁷). Collections: WSUC
173. *Diadasia (Coquillettapis) nigrifrons* (Cresson, 1878). County records: Chelan¹, Kittitas^{1,2,3}, Whitman^{8,36}, Yakima³⁶. Seasonality: Jul^{1,2,3} (2023¹). Collections: SEMC, WSUC. Floral records: MALVACEAE: *Sidalcea oregana*⁸
174. ‡ *Diadasia (Coquillettapis) nitidifrons* Cockerell, 1905. County records: Chelan³, Yakima³⁶. Seasonality: Jun¹ (1919¹). Collections: UCRC
175. ‡ *Diadasia (Dasiapis) ochracea* (Cockerell, 1903). County records: Whitman³⁶, Yakima^{7,36,121}. Seasonality: Jun^{7,121} (1903^{7,121}). Collections: WSUC. Comments: Adlakha (1969) synonymizes *D. ochracea* with *D. olivacea*; however, Snelling (1994) determined these were separate species and notes Washington records as *D. ochracea*.
176. *Diadasia (Diadasia) enavata* (Cresson, 1872). County records: Asotin^{1,2}, Benton^{1,2,3,7}, Klickitat^{2,3}, Walla Walla^{1,2,3,7,36,71}, Whitman^{1,2,3,7,8,36}, Yakima⁷. Seasonality: Jun^{1,2,7}, Jul^{1,2,3,7}, Aug^{1,2,3,7}, Sep^{1,2} (2012^{1,2}). Collections: BBSL, BugGuide, INHS, TAMU, WSUC. Floral records: ASTERACEAE: *Helianthus*^{3,7}, *H. annuus*⁸

Eucerini

Genus *Epimelissodes* Ashmead

177. *Epimelissodes (Epimelissodes) obliquus* (Say, 1837). County records: Yakima². Seasonality: Jul² (2015²). Collections: BugGuide, iNaturalist
- 177a. *Epimelissodes (Epimelissodes) obliquus expurgatus* Cockerell, 1925. County records: Benton^{1,2,3}, Grant^{1,2}, Walla Walla^{1,2,3}, Whitman⁷², Yakima⁷². Seasonality: Jul^{1,2}, Aug^{1,2,3} (2020^{1,2}). Collections: BBSL, iNaturalist

Genus *Eucera* Scopoli

178. *Eucera (Synhalonia) actiosa* (Cresson, 1878). County records: Benton^{1,2,3}, Chelan^{1,2,3}, Garfield^{1,2,3,46}, Spokane^{1,2}, Whitman^{8,109}. Seasonality: Mar^{1,2}, Apr^{1,2,3}, May^{1,2,3,109}, Jun^{1,2,3,46} (2015^{1,2}). Collections: BBSL, SEMC, WSUC. Floral records: ASTERACEAE: *Balsamorhiza careyana*³, *B. sagittata*⁸; FABACEAE: *Lupinus*⁸, *Onobrychis viciifolia*³, *Vicia villosa*⁸; ROSACEAE: *Malus domestica*⁸, *Prunus virginiana*⁸
179. *Eucera (Synhalonia) amsinckiae* (Timberlake, 1969). County records: Benton^{1,2,3}, Walla Walla^{1,2,3}, Whitman¹⁰⁹. Seasonality: Apr^{1,2,3}, May^{1,2,3} (2015^{1,2}). Collections: BBSL

180. †‡ *Eucera (Synhalonia) angustifrons* (Timberlake, 1969). County records: **Spokane**². Seasonality: Jun² (1957²). Collections: SEMC
181. *Eucera (Synhalonia) delphinii* (Timberlake, 1969). County records: Asotin^{1,2,3,109}, Garfield⁴⁶, **Spokane**^{1,2}, **Stevens**^{1,2}, Whitman^{1,2,3,109}. Seasonality: Apr^{1,2}, May^{1,2,109}, Jul^{1,2,3,109} (2015^{1,2}). Collections: BBSL, SEMC
182. § *Eucera (Synhalonia) douglasiana* (Cockerell, 1906). County records: **Benton**^{1,2}, Grant^{109,112,121}. Seasonality: Apr^{1,2}, Jul^{109,121} (2015^{1,2}). Collections: BBSL. [= *Tetralonia douglasiana* Cockerell, 1906]. Conservation status: Vulnerable (Shepherd 2005b; National Research Council 2007). Comments: Cockerell (1906b) and Timberlake (1969) note a record at Steamboat Rock, Grand Coulee in Douglas County; however, Steamboat Rock, Grand Coulee is located in Grant County.
183. *Eucera (Synhalonia) edwardsii* (Cresson, 1878). County records: **Benton**^{1,2,3}, Chelan¹³⁶, Franklin^{1,2,118}, Garfield^{1,2,3,46}, **Grant**⁶, **Klickitat**^{1,2}, **Spokane**^{1,2,3}, **Walla Walla**^{1,2,3}, Whitman^{1,2,3,6,8}, **Yakima**^{1,2,3,6}. Seasonality: Apr^{1,2,3}, May^{1,2,3,118}, Jun^{1,2,3,6}, Jul^{1,2} (2022⁶). Collections: BBSL, NMNH, SEMC, WSDA, WSUC. Floral records: DIPSACACEAE: *Dipsacus fullonum*⁸; FABACEAE: *Astragalus bungeanus*³, *A. columbianus*³, *Lupinus polyphyllus*⁸, *Vicia villosa*⁸
184. *Eucera (Synhalonia) frater* (Cresson, 1878). County records: **Benton**^{1,2}, **Chelan**^{1,2,3}, Garfield^{1,2,46}, **Jefferson**^{1,2}, **Klickitat**^{1,2}, **San Juan**^{1,2,124,136}, **Stevens**^{1,2,109}, Thurston^{1,2,118}, **Walla Walla**^{1,2,3}, Whitman^{1,2,3,6,8,61}. Seasonality: Mar¹, Apr^{1,2,109,118}, May^{1,2,3,118}, Jun^{1,2,3,6,46,118}, Jul^{1,2,118}, Aug^{1,2} (2017¹³⁶). Collections: BBSL, BugGuide, NMNH, PWRC, WSDA, WSUC. [= *Synhalonia edwardsii latior* Cockerell, 1897]. Floral records: ASPARAGACEAE: *Triteleia grandiflora*⁸; ASTERACEAE: *Balsamorhiza sagittata*⁸, *Hypochaeris radicata*¹³⁶; FABACEAE: *Astragalus sinuatus*³, *Lathyrus japonicus*¹³⁶, *Lupinus*^{3,118}, *Trifolium repens*⁸, *Vicia sativa*¹³⁶; OLEACEAE: *Syringa*⁸; PLANTAGINACEAE: *Penstemon attenuatus*⁸; ROSACEAE: *Malus domestica*⁸
- 184a. § *Eucera (Synhalonia) frater lata* (Provancher, 1888). County records: Asotin^{1,2,3,109}, **Chelan**^{1,2,3}, **Garfield**^{1,2,3}, Island¹⁰⁹, **Jefferson**^{1,2}, **King**¹⁰⁹, **Pierce**^{1,2,3}, **San Juan**^{1,2,3,5,22,124}, Whitman^{1,2,109}. Seasonality: Apr^{1,2,3,5}, May^{1,2,3,5,109}, Jun^{1,2,3,5,109}, Jul^{1,2,3,109}, Aug¹⁰⁹ (2015^{1,2,22}). Collections: BBSL, PWRC, SEMC. Conservation status: Vulnerable (Shepherd 2005c; National Research Council 2007). Floral records: ASPARAGACEAE: *Camassia quamash*⁵; ASTERACEAE: *Taraxacum officinale*⁵; BERBERIDACEAE: *Berberis aquifolium*⁵; FABACEAE: *Astragalus bungeanus*³, *A. cicer*³; HYDROPHYLLACEAE: *Hydrophyllum*¹⁰⁹
185. *Eucera (Synhalonia) fulvitaris* (Cresson, 1878). County records: Benton^{1,2,3,109}, Chelan^{1,2,3,109}, **Douglas**^{1,2}, Garfield⁴⁶, **Walla Walla**^{1,2}, **Yakima**^{1,2,3,109,121}. Seasonality: Mar^{1,2}, Apr^{1,2,3,121}, May^{1,2,3} (2015^{1,2}). Collections: BBSL, SEMC. [= *Synhalonia yakimensis* Cockerell, 1906]. **Holotype**. USA, Washington, Yakima County, Yakima. [= *Tetralonia yakimensis* Cockerell, 1906]. Floral records: FABACEAE: *Astragalus columbianus*³
186. *Eucera (Synhalonia) hurdi* (Timberlake, 1969). County records: **Asotin**², **Spokane**^{1,2}, Whitman^{3,109}. Seasonality: Apr^{1,2,3,109}, May^{1,2} (2015^{1,2}). Collections: BBSL, SEMC
187. † *Eucera (Synhalonia) speciosa* (Cresson, 1878). County records: **Benton**^{1,2,3}. Seasonality: May^{1,2,3}, Jun^{1,2} (2015^{1,2}). Collections: BBSL

Genus *Melissodes* Latreille

188. *Melissodes* (*Callimelissodes*) *glenwoodensis* Cockerell, 1905. County records: Grant⁴⁹
189. *Melissodes* (*Callimelissodes*) *lupinus* Cresson, 1878. County records: Benton^{1,2,7,71}, Klickitat^{1,2}, Walla Walla^{1,2,7,71}, Whitman^{1,2,7,8,49}, Yakima⁷. Seasonality: Jun^{1,2,7}, Jul^{1,2,7}, Aug^{1,2}, Sep^{1,2} (2015^{1,2}). Collections: BBSL, WSUC. Floral records: ASTERACEAE: *Helianthus annuus*⁸
190. ‡ *Melissodes* (*Callimelissodes*) *metenua* Cockerell, 1924. County records: Kittitas^{1,2}, Whitman^{7,8}, Yakima⁴⁹. Seasonality: Jul^{1,2,7}, Aug⁷ (1962⁷). Collections: TAMU, WSUC. Floral records: ASTERACEAE: *Pyrrocoma liatriformis*⁸
191. ‡ *Melissodes* (*Callimelissodes*) *plumosus* LaBerge, 1961. County records: Yakima⁴⁹. Seasonality: Jul⁴⁹, Aug⁴⁹ (1941⁴⁹)
192. ‡ *Melissodes* (*Callimelissodes*) *stearnsi* Cockerell, 1905. County records: Kittitas^{1,2,49}, Okanogan^{1,2,3}. Seasonality: Jul^{1,2,3} (1949^{1,2}). Collections: BBSL, SEMC
193. *Melissodes* (*Eumelissodes*) *agilis* Cresson, 1878. County records: Adams^{7,49}, Asotin^{1,2,49}, Benton^{1,2,3,7,71}, Chelan^{7,49}, Douglas^{1,2}, Garfield⁷, Grant^{1,2}, Klickitat⁴⁹, Spokane^{1,2}, Walla Walla^{1,2,3,7,49,71}, Whitman^{1,2,7,8,49}, Yakima^{7,49}. Seasonality: Jun^{1,2,3,7}, Jul^{1,2,7}, Aug^{1,2,3,7}, Sep^{1,2,7}, Oct^{1,2,7} (2015⁷). Collections: BBSL, SEMC, TAMU, WSUC. Floral records: ASTERACEAE: *Helianthus annuus*⁸; GERANIACEAE: *Geranium*⁸
194. *Melissodes* (*Eumelissodes*) *bimatrix* LaBerge, 1961. County records: Benton⁷, Franklin⁴⁹, Grant⁴⁹, Okanogan⁴⁹, Walla Walla⁴⁹, Whitman⁷, Yakima⁴⁹. Seasonality: Sep⁷ (1993⁷). Collections: WSUC
195. † *Melissodes* (*Eumelissodes*) *brevipyga* LaBerge, 1961. County records: Benton⁷, Yakima⁷. Seasonality: Jul⁷ (2015⁷). Collections: WSUC
196. *Melissodes* (*Eumelissodes*) *grindeliae* Cockerell, 1898. County records: Yakima⁴⁹
197. *Melissodes* (*Eumelissodes*) *lutulentus* LaBerge, 1961. County records: Adams^{7,49}, Benton⁷, Walla Walla⁷. Seasonality: Jun⁷, Aug⁷ (2015⁷). Collections: WSUC
198. *Melissodes* (*Eumelissodes*) *menuachus* Cresson, 1868. County records: Benton^{1,2}, Grant⁴⁹, Okanogan^{2,3}, Walla Walla^{1,2,3,71}. Seasonality: Aug^{1,2}, Sep^{1,2,3} (2015^{1,2}). Collections: BBSL, SEMC
199. *Melissodes* (*Eumelissodes*) *microstictus* Cockerell, 1905. County records: Benton⁷, Chelan⁷, Island^{2,7,49}, King^{1,2,49}, Kitsap^{7,23, 134}, Kittitas^{1,2}, Klickitat^{1,2}, Okanogan^{1,2,59}, Pend Oreille⁴⁹, Pierce^{1,2,49}, San Juan^{1,2,7,49,124}, Spokane^{1,2,49}, Thurston^{1,2,49}, Walla Walla^{1,2,7,49}, Whatcom^{7,49}, Whitman^{2,49}, Yakima⁴⁹. Seasonality: Apr^{1,2}, Jun^{1,2,7}, Jul^{1,2,7,134}, Aug^{1,2,7,134}, Sep^{1,2} (2015^{1,2}). Collections: BBSL, FMNH, iNaturalist, INHS PWRC, SEMC, TAMU, WSUC. Floral records: ASTERACEAE: *Anaphalis margaritacea*⁵⁹, *Erigeron speciosus*⁵⁹, *Hypochaeris radicata*¹³⁴
200. *Melissodes* (*Eumelissodes*) *pallidisignatus* Cockerell, 1905. County records: Benton^{1,2,7}, Island^{2,3,49}, Jefferson^{1,2}, Kittitas², Klickitat², Okanogan^{1,2,59}, Pend Oreille^{2,49}, Stevens⁴⁹, Walla Walla^{1,2,7,8,71}, Whitman², Yakima². Seasonality: Jun^{1,2},

- Jul^{1,2,7}, Aug^{1,2,3}, Sep^{1,2} (2015^{1,2}). Collections: BBSL, INHS, SEMC, UCRC, WSUC. Floral records: ASTERACEAE: *Achillea millefolium*⁵⁹, *Erigeron speciosus*⁵⁹, *Senecio triangularis*⁵⁹; BRASSICACEAE: *Sisymbrium altissimum*⁵⁹
201. *Melissodes (Eumelissodes) paululus* LaBerge, 1961. County records: Benton⁷, Walla Walla^{1,2,71}, Yakima⁴⁹. Seasonality: Jun^{1,2}, Jul^{1,2}, Aug^{1,2}, Sep^{1,2} (1998^{1,2}). Collections: BBSL, WSUC
202. *Melissodes (Eumelissodes) robustior* Cockerell, 1915. County records: Adams⁷, Asotin⁴⁹, Benton^{1,2,7}, Spokane⁷, Walla Walla^{1,2,3,7,49}, Whitman^{1,2,3,7,8,49}, Yakima^{7,49}. Seasonality: Jun^{1,2,3,7}, Jul^{2,3,7}, Aug⁷ (1995^{1,3}). Collections: BBSL, INHS, SEMC, WSUC. Floral records: ASTERACEAE: *Helianthus annuus*⁸
203. *Melissodes (Eumelissodes) saponellus* Cockerell, 1908. County records: Benton^{1,2,7}, Grant⁴⁹, Yakima⁷. Seasonality: May^{1,2,7}, Jun^{1,2,7,49}, Jul⁷ (2015^{1,2,7}). Collections: BBSL, WSUC. **Holotype**. USA, Washington, Grant County, Grand Coulee, Soap Lake; 29 June 1902
204. *Melissodes (Eumelissodes) semilupinus* Cockerell, 1905. County records: Benton^{1,7}, Chelan¹, Walla Walla^{7,49}, Whitman⁷, Yakima^{2,7}. Seasonality: Jul⁷, Aug^{1,7}, Sep^{1,2,7}, Oct⁷ (1995¹). Collections: INHS, WSUC
205. *Melissodes (Eumelissodes) subagilis* Cockerell, 1905. County records: Adams⁷, Benton⁷, Grant^{7,49}. Seasonality: Jul⁷, Aug⁷, Sep⁷ (2015⁷). Collections: WSUC
206. ‡ *Melissodes (Eumelissodes) verbesinarum* Cockerell, 1905. County records: Adams⁴⁹, Yakima⁷. Seasonality: Aug⁷ (1957⁷). Collections: WSUC
207. *Melissodes (Eumelissodes) vernalis* LaBerge, 1961. County records: Adams⁴⁹, Benton⁷. Seasonality: Jun⁷ (2014⁷). Collections: WSUC
208. *Melissodes (Heliomelissodes) rivalis* Cresson, 1872. County records: Adams^{7,108}, Asotin¹⁰⁸, Benton^{1,2,3,7,71}, Columbia⁷, Garfield¹⁰⁸, Grant⁷, King^{1,2,3}, Kittitas^{1,2,3}, Klickitat^{1,2,7}, Lewis^{2,3,108}, Lincoln¹⁰⁸, San Juan^{1,2,3,124}, Walla Walla^{1,2,7,71}, Whitman^{7,8,108}, Yakima^{7,108}. Seasonality: Jun^{1,2,3,7}, Jul^{1,2,3,7}, Aug^{1,2,7}, Sep^{1,2}, Oct^{1,2} (2012^{1,2}). Collections: BBSL, PWRC, SEMC, WSUC. Floral records: ASTERACEAE: *Cirsium vulgare*⁸
209. *Melissodes (Melissodes) communis* Cresson, 1878. County records: Walla Walla^{1,2,3}. Seasonality: Jul^{1,2,3} (1998^{1,2,3}). Collections: BBSL
- 209a. *Melissodes (Melissodes) communis alopex* Cockerell, 1928. County records: Asotin^{2,3,72}, Benton⁷, Yakima^{1,2,7,72}. Seasonality: Jun^{2,3,7}, Jul^{1,2,3,7} (2015⁷). Collections: SEMC, WSUC
210. *Melissodes (Tachymelissodes) dagosus* Cockerell, 1909. County records: Adams^{7,108}, Benton⁷, Grant^{7,108}, Lincoln⁷, Yakima^{7,108}. Seasonality: Jun⁷, Jul⁷ (1973⁷). Collections: WSUC

Nomadinae: Ammobatini

Genus *Oreopasites* Cockerell

211. *Oreopasites (Oreopasites) vanduzeei* Cockerell, 1925. County records: Benton^{1,2,3,9}. Seasonality: May^{1,2,3}, Jun⁹ (1990^{1,2,3}). Collections: AMNH

Epeolini

Genus *Epeolus* Latreille

212. † *Epeolus americanus* (Cresson, 1878). County records: **Benton**^{1,2}, **Walla Walla**^{1,2}. Seasonality: Apr^{1,2}, May^{1,2} (2022^{1,2}). Collections: BBSL, iNaturalist
213. *Epeolus compactus* Cresson, 1878. County records: **King**^{1,2}, **Klickitat**^{1,2}, **Pierce**^{1,2,4,73,74}, **Thurston**^{1,2}. Seasonality: Jun^{1,2,74}, Jul^{1,2,4,73} (2021^{1,2}). Collections: BBSL, iNaturalist, PCYU. Host records: *Colletes kincaidii* Cockerell⁷³
214. *Epeolus emiliae* Onuferko and Sheffield, 2022. County records: **Benton**^{1,64}. Seasonality: Sep¹, Oct^{1,64} (2023¹). Collections: iNaturalist. Comments: iNaturalist record #98573666
215. *Epeolus minimus* (Robertson, 1902). County records: **Benton**^{1,2}, **Ferry**^{1,2}, **Spokane**^{1,2}, **Thurston**³. Seasonality: May^{1,2}, Jul^{1,2}, Aug^{1,2} (2015^{1,2}). Collections: AMNH, BBSL, SEMC
216. † *Epeolus novomexicanus* Cockerell, 1912. County records: **Benton**^{1,2}. Seasonality: Sep^{1,2} (2021^{1,2}). Collections: iNaturalist
217. *Epeolus olympiellus* Cockerell, 1904. County records: **Benton**^{1,2}, **Douglas**^{1,2}, **Garfield**^{1,2,4,73,74}, **San Juan**²², **Thurston**^{1,2,3,52,73,74,118}, **Whitman**^{1,2,73,74}. Seasonality: May^{1,2,4,74}, Jun^{1,2,74}, Jul^{1,2,3,52,73,74,118}, Aug^{1,2,73,74} (2021^{1,2}). Collections: AMNH, iNaturalist, NMNH, PCYU. **Holotype**. USA, Washington, Thurston County, Olympia; 2 July 1896; T Kincaid; USNM 534051. [= *Epeolus humillimus* Cockerell, 1918]. **Holotype**. USA, Washington, Whitman County, Pullman; 2 August 1908; WM Mann; Type No. 100017, USNM ENT 00534047

Genus *Triepeolus* Robertson

218. *Triepeolus argus* Rightmyer, 2008. County records: **Benton**^{3,75}, **Yakima**^{3,75}. Seasonality: Sep^{3,75}, Oct³ (1993^{3,75}). Collections: Miliczky. Host records: *Melissodes pallidisignatus* Cockerell⁷⁵. Floral records: ASTERACEAE: *Ericameria nauseosa* var. *nauseosa*^{3,75}
219. *Triepeolus argyreus* (Cockerell, 1907). County records: **Benton**³, **Klickitat**³, **Walla Walla**³, **Yakima**^{3,75}. Seasonality: Aug^{3,75}, Sep³ (1992³). Collections: Miliczky. **Holotype**. USA, Washington, Yakima County, North Yakima; 4 August 1903; USNM No. 100019. Host records: *Melissodes pallidisignatus* Cockerell^{3,75}. Floral records: ASTERACEAE: *Centromadia pungens* ssp. *pungens*³, *Dieteria canescens*³, *Ericameria nauseosa* var. *nauseosa*³
220. † *Triepeolus concavus* (Cresson, 1878). County records: **Adams**³, **Franklin**¹, **Yakima**³. Seasonality: Jul³, Aug³ (2023¹). Collections: NMNH, iNaturalist. Host records: *Epimelissodes obliquus* (Say)⁷⁵
221. † *Triepeolus grindeliae* Cockerell, 1907. County records: **Benton**^{1,2,3}. Seasonality: May^{1,2}, Jun^{1,2,3}, Sep^{1,2} (1995^{1,2,3}). Collections: BBSL. Floral records: ASTERACEAE: *Rhaponticum repens*³

222. † *Triepeolus helianthi* (Robertson, 1897). County records: **Klickitat**^{2,3}, **Whitman**^{2,3}. Seasonality: Aug^{2,3}, Sep^{2,3} (1982^{2,3}). Collections: INHS. Host records: *Nomia melanderi* Cockerell⁷⁵, *Melissodes agilis* Cresson⁷⁵
223. *Triepeolus paenepectoralis* Viereck, 1905. County records: **Island**³, **Jefferson**^{1,2}, **Kitsap**^{2,3,75}, **Klickitat**^{1,2}, **Okanogan**⁵⁹, **Whitman**^{1,2,3,51}. Seasonality: Jul^{1,2}, Aug^{1,2,3,51}, Sep^{1,2,3,51} (2022^{1,2}). Collections: BBSL, iNaturalist, INHS. Host records: *Melissodes microstictus* Cockerell⁷⁵
224. *Triepeolus texanus* (Cresson, 1878). County records: **Walla Walla**^{1,2}, **Whitman**³, **Yakima**^{1,2,75}. Seasonality: Jun^{1,2}, Jul³, Aug^{1,2,75} (2012^{1,2}). Collection: BBSL, NMNH. [= *Triepeolus eldredi* Cockerell, 1907]. **Holotype**. USA, Washington, Yakima County, North Yakima; 7 August 1903; USNM No. 100029. Host records: *Melissodes druriellus* (Kirby)⁷⁵, *Nomia melanderi* Cockerell⁷⁵
225. † *Triepeolus timberlakei* Cockerell, 1929. County records: **Whitman**^{1,2,3}. Seasonality: Sep^{1,2,3} (1982^{1,2,3}). Collections: BBSL

Melectini

Genus *Brachymelecta* Linsley

226. † *Brachymelecta californica* (Cresson, 1878). County records: **Benton**⁷, **Jefferson**^{1,2}, **Whitman**⁷, **Yakima**⁷. Seasonality: Jun⁷, Aug^{1,2}, Sep⁷ (2022^{1,2}). Collections: iNaturalist, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024)

Genus *Melecta* Latreille

227. *Melecta (Melecta) pacifica* Cresson, 1878. County records: **Benton**^{1,2}, **Okanogan**^{1,2,3,59}, **Spokane**^{1,2}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2}, Jun^{1,2,3} (2015^{1,2}). Collections: BBSL, SEMC
- 227a. *Melecta (Melecta) pacifica fulvida* Cresson, 1879. County records: **Whitman**³⁵
228. *Melecta (Melecta) separata* Cresson, 1879. County records: **Chelan**¹³⁶, **Pierce**^{1,2}, **Spokane**^{1,2}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2,3} (2020^{1,2}). Collections: BBSL, iNaturalist. Floral records: FABACEAE: *Astragalus speirocarpus*³
- 228a. *Melecta (Melecta) separata callura* (Cockerell, 1926). County records: **Walla Walla**³⁵. Comments: Linsley (1939) lists the Washington record as Whitman County (Walla Walla). Walla Walla is located in Walla Walla County.
- 228b. † *Melecta (Melecta) separata separata* Cresson, 1879. County records: **Benton**^{1,2}, **Chelan**^{1,2}, **Walla Walla**^{1,2,3}. Seasonality: Mar^{1,2}, Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2} (2022^{1,2}). Collections: BBSL, iNaturalist
229. † *Melecta (Melecta) thoracica* Cresson, 1875. County records: **Douglas**^{1,2}, **Spokane**^{1,2}, **Whitman**³. Seasonality: Apr^{1,2,3}, May^{1,2,3} (2015^{1,2}). Collections: BBSL

Genus *Zacosmia* Ashmead

230. ‡ *Zacosmia maculata maculata* (Cresson, 1879). County records: Walla Walla^{3,35}. Seasonality: Jun³ (1936³). Collections: BBSL. Comments: Linsley (1939) lists the Washington record as Whitman County (Walla Walla). Walla Walla is located in Walla Walla County.

Nomadini

Genus *Nomada* Scopoli

231. *Nomada aldrichi* Cockerell, 1910. County records: Spokane⁷⁶. Seasonality: May⁷⁶. [= *Nomada vicinalis aldrichi* Cockerell, 1910]
232. ‡ *Nomada articulata* Smith, 1854. County records: Kitsap^{1,2,3}, Whitman⁷⁶. Seasonality: May^{1,2,3,76} (1965^{1,2,3}). Collections: BBSL, BugGuide
233. ‡ *Nomada bella* Cresson, 1863. County records: King¹²⁰, Thurston¹²⁰. Seasonality: Jun¹²⁰ (1897¹²⁰)
234. *Nomada civilis* Cresson, 1878. County records: Whitman⁷⁶. Seasonality: May⁷⁶. Comments: Discover Life has synonymized *N. civilis* with *N. opposita* without reference or explanation. We are not aware of any published work that that synonymizes these species and retain them as separate taxa in this checklist.
- 234a. *Nomada civilis spokaneensis* Cockerell, 1910. County records: Spokane^{1,2,3,76}. Seasonality: May^{3,76}. Collections: NMNH. **Holotype**. USA, Washington, Spokane County, Spokane; 30 May; WM Mann; Type No. 29476, USNM ENT 00533989. Comments: Discover Life has synonymized *N. civilis spokaneensis* with *N. opposita* without reference or explanation. We are not aware of any published work that that synonymizes these species and retain them as separate taxa in this checklist.
235. *Nomada citrina* Cresson, 1878. [= *Xanthidium citrinum* Cresson, 1878]. Comments: Viereck et al. (1905) notes *N. citrina* occurs in Washington, but do not provide a locality.
236. †‡ *Nomada collinsiana* Cockerell, 1905. County records: Walla Walla^{1,2,3}. Seasonality: May^{1,2,3}, Jun^{1,2} (1939^{1,2}). Collections: BBSL
237. *Nomada coquilletti* Cockerell, 1903. County records: Whitman⁷⁶. Seasonality: Mar⁷⁶, Apr⁷⁶
238. ‡ *Nomada cressonii trevoriana* Viereck, 1905. County records: Thurston^{1,2,76,118}. Seasonality: Apr^{1,2,118} (1894^{1,2,118}). Collections: NMNH. **Holotype**. USA, Washington, Thurston County, Olympia; 22 April 1894
239. † *Nomada crotchii* Cresson, 1878. County records: Benton^{1,2}, Walla Walla^{1,2,3}. Seasonality: Mar^{1,2}, May^{1,2,3} (2022^{1,2}). Collections: BBSL, iNaturalist
240. *Nomada cuneata* (Robertson, 1903). County records: Whitman⁷⁶. Seasonality: May⁷⁶

241. *Nomada edwardsii* Cresson, 1878. County records: Benton^{1,2}, Kittitas^{2,3}, Spokane^{1,2}, Walla Walla^{1,2,3}, Whitman^{1,2,3,76}. Seasonality: Mar^{1,2}, Apr^{1,2,3}, May^{1,2,3}, Jun^{1,2,76}, Jul^{1,2,3} (2015^{1,2}). Collections: BBSL, INHS. [= *Holonomada edwardsii* Cresson, 1878]
- 241a. *Nomada edwardsii vinnula* Cresson, 1879. County records: Spokane⁷⁶, Whitman⁷⁶. Seasonality: May⁷⁶
242. ‡ *Nomada erythrochroa* Cockerell, 1903. County records: Franklin^{1,2,3,50,76,118}, Yakima^{50,76}. Seasonality: May^{1,2,3,118}, Jun^{50,76} (1903⁵⁰). Collections: NMNH. **Holotype**. USA, Washington, Franklin County, Pasco; 25 May 1896; Type No. 13185, USNM ENT 00533921
243. ‡ *Nomada flammigera* Cockerell, 1906. County records: Yakima^{2,50,76}. Seasonality: May^{2,50}, Jul⁷⁶ (1906⁷⁶). Collections: LACM. **Holotype**. USA, Washington, Yakima County, North Yakima; 15 May 1903; E Jenne.
244. *Nomada grayi eastonensis* Cockerell, 1903. County records: Kittitas^{1,2,3,76,118,120}. Collections: NMNH. **Holotype**. USA, Washington, Kittitas County, Easton; Type No. 13163, USNM ENT 00533917. [= *Gnathias grayi eastonensis* Cockerell, 1903]
245. *Nomada hesperia hesperia* Cockerell, 1903. County records: Kittitas³, Walla Walla^{1,2,3}, Whitman^{2,3,76,77}. Seasonality: Apr^{3,77}, May^{1,2,3,76,77}, Jun⁷⁷ (1989³). Collections: BBSL, INHS. Floral records: ASTERACEAE: *Balsamorhiza*³
246. *Nomada itamera* Cockerell, 1910. County records: Whitman^{2,76}. Seasonality: May⁷⁶. Collections: AMNH. **Holotype**. USA, Washington, Whitman County, Pullman; WM Mann; AMNH_IZC 00323820
247. ‡ *Nomada jennei* Cockerell, 1906. County records: Yakima^{1,2,3,121}. Seasonality: Sep^{1,2,3,121} (1903^{1,2,3,121}). Collections: NMNH. **Holotype**. USA, Washington, Yakima County, North Yakima; 26 September 1903; E Jenne; Type No. 29484; USNM ENT 00533939
248. *Nomada kincaidiana* Cockerell, 1903. **Holotype**. USA: Washington State
249. *Nomada lehighensis* Cockerell, 1903. County records: Asotin⁶⁵. Seasonality: May⁶⁵ (2007⁶⁵). Collection: PCYU
250. ‡ *Nomada malonella* Cockerell, 1910. County records: Whitman^{1,2,76}. Seasonality: May^{2,76} (1909^{2,76}). Collections: LACM, UCMC. **Holotype**. USA, Washington, Whitman County, Wawawai; 1 May 1909
251. ‡ *Nomada malonina* Cockerell, 1910. County records: Whitman^{1,2,3,76}. Seasonality: May^{1,2,3,76} (1909^{1,2,3,76}). Collections: NMNH. **Holotype**. USA, Washington, Whitman County, Wawawai; 15 May 1909; WM Mann; Type No 29487, USNM ENT 00533947
252. *Nomada mutans* Cockerell, 1910. County records: Jefferson^{1,2}, Pacific¹¹⁰, Whitman^{1,2,3,76,110,111}, Yakima¹¹¹. Seasonality: Jun^{1,2}, Jul¹¹⁰, Aug^{1,2,3,76,110,111} (2015^{1,2}). Collections: BBSL, NMNH, UCMC. **Holotype**. USA, Washington, Whitman County, Pullman; 9 August 1908; WM Mann; USNM 13192. **Paratype**. USA, Washington, Whitman County, Pullman; 9 August 1908; WM Mann
253. ‡ *Nomada orcusella* Cockerell, 1910. County records: San Juan^{2,76}. Seasonality: Jul^{2,76} (1909^{2,76}). Collections: LACM

254. ‡ *Nomada packardiella* Cockerell, 1906. County records: **Ferry**^{1,2}, **Whitman**⁷⁶. Seasonality: May⁷⁶, Aug^{1,2} (1931^{1,2}). Collections: SEMC
255. *Nomada pascoensis* Cockerell, 1903. County records: **Benton**^{2,3}, **Franklin**^{1,2,3,120}, **Klickitat**^{1,2}, **Walla Walla**^{1,2,3}. Seasonality: Apr^{2,3}, May^{1,2,3,120}, Aug^{1,2} (2011^{1,2}). Collections: BBSL, NMNH, SEMC
256. ‡ *Nomada perbella* (Viereck, 1905). County records: **Grays Harbor**^{76,118}, **King**⁷⁶, **Thurston**^{76,118}, **Whitman**⁷⁶. Seasonality: May^{76,118}, Jun¹¹⁸ (1904¹¹⁸). [= *Gnathias perbella* Viereck, 1905]
257. ‡ *Nomada perplexans* Cockerell, 1910. County records: **Whitman**^{1,2,3,76}. Seasonality: Jun^{1,2,3,76} (1908^{1,2,3,76}). Collections: NMNH. **Holotype**. USA, Washington, Whitman County, Pullman; 7 June 1908; WM Mann; Type No. 29493, USNM ENT 00533967
258. *Nomada pulsatillae* Cockerell, 1906. County records: **Spokane**⁷⁶, **Whitman**⁷⁶. Seasonality: May⁷⁶
259. *Nomada rivalis* Cresson, 1878. [= *Xanthidium rivale* Cresson, 1878]. Comments: Viereck et al. (1905) note *N. rivalis* occurs in Washington, but do not provide a locality.
260. † *Nomada scita* Cresson, 1878. County records: **Adams**^{1,2,3}, **Benton**^{1,2,3}, **Kititas**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2} (2015^{1,2}). Collections: BBSL, SEMC
261. ‡ *Nomada semisuavis* Cockerell, 1910. County records: **Whitman**^{1,2,76}. Seasonality: Jul^{1,2,76} (1908^{1,2,76}). Collections: LACM, UCMC. **Holotype**. USA, Washington, Whitman County, Wawawai; 4 July 1908; WM Mann
262. † *Nomada suavis* Cresson, 1878. County records: **Clallam**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whitman**³. Seasonality: Jun^{1,2,3}, Jul^{1,2,3} (2000^{1,2,3}). Collections: AMNH, BBSL. Host record: *Nomia melanderi* Cockerell⁷⁸
263. † *Nomada texana* Cresson, 1872. County records: **Walla Walla**^{1,2}, **Whitman**^{1,2}. Seasonality: Apr^{1,2}, Jul^{1,2} (2011^{1,2}). Collections: BBSL, TTU. [= *Nomada heiligbrodtii* Cresson, 1878]
264. *Nomada ultima* Cockerell, 1903. County records: **Spokane**⁷⁶. Seasonality: May⁷⁶. [= *Nomada modocorum* Cockerell, 1903]
265. *Nomada washingtoni* Cockerell, 1903. Collections: NMNH. **Holotype**. USA, Washington State. [= *Gnathias washingtoni* Cockerell, 1903].

Xylocopinae: Ceratinini

Genus *Ceratina* Latreille

266. *Ceratina* (*Zadontomerus*) *acantha* Provancher, 1895. County records: **Chelan**^{1,2,3}, **Clallam**^{1,2,3}, **Cowlitz**^{1,2,3}, **Jefferson**^{1,2}, **King**^{1,2,3,58,125}, **Kitsap**^{1,2,3}, **Klickitat**^{1,2}, **Mason**³, **Pierce**^{1,2,3}, **San Juan**^{5,6}, **Spokane**^{1,2}, **Thurston**^{6,125,133}, **Walla Walla**^{1,2,3,71}, **Whitman**^{1,2,3,6,8}. Seasonality: Apr^{1,2,5}, May^{1,2,3,5,58}, Jun^{1,2,3,133}, Jul^{1,2,3,5,6}, Aug^{1,2,3,6}, Sep^{1,2,6} (2020¹³³). Collections: AMNH, BBSL, JRYA, SEMC, TAMU,

WSDA, WSUC. Floral records: APIACEAE: *Lomatium*⁸; ASPARAGACEAE: *Camassia quamash*⁵; ASTERACEAE: *Cirsium vulgare*⁸, *Eriophyllum lanatum*^{8,133}, *Helianthus annuus*⁸, *Hypochaeris radicata*⁵, *Taraxacum officinale*⁵; GERANIACEAE: *Geranium viscosissimum*⁸; HYPERICACEAE: *Hypericum perforatum*¹³³; MALVACEAE: *Iliamna longisepala*³; PLANTAGINACEAE: *Penstemon triphyllus*⁸; ROSACEAE: *Rosa*⁸

267. †‡ *Ceratina (Zadontomerus) micheneri* Daly, 1973. County records: **Whatcom**⁷. Seasonality: Jun⁷ (1945⁷). Collections: WSUC
268. *Ceratina (Zadontomerus) nanula* Cockerell, 1897. County records: **Jefferson**^{1,2}, **Klickitat**^{1,2}, San Juan^{1,2,5,124,136}, **Spokane**^{1,2}, Thurston¹³³, Whitman^{1,2,3,6,61}. Seasonality: Apr^{1,2,61}, May^{1,2,6,133}, Jun^{1,2,6,133}, Jul^{1,2,5,6,133}, Aug^{1,2,6}, Sep^{1,2}, Oct^{1,2} (2019¹³³). Collections: BBSL, PWRC, WSDA. Floral records: ASPARAGACEAE: *Brodiaea coronaria*^{133,136}; ASTERACEAE: *Cirsium arvense*¹³⁶, *Crepis capillaris*^{5,133,136}, *Eriophyllum lanatum*¹³³, *Grindelia integrifolia*⁵, *Hypochaeris radicata*^{5,136}, *Taraxacum officinale*¹³⁶; CARYOPHYLLACEAE: *Cerastium arvense*¹³³; CONVULVACEAE: *Calystegia soldanella*¹³⁶; ONAGRACEAE: *Clarkia amoena*¹³³; ROSACEAE: *Rubus bifrons*¹³⁶
269. *Ceratina (Zadontomerus) pacifica* H. S. Smith, 1907. County records: Chelan⁵⁸, **Grant**^{1,2,4}, **Klickitat**^{2,3}, Okanogan⁵⁸, **Spokane**^{1,2}, Whitman^{1,2,58}. Seasonality: Apr⁵⁸, May^{1,2,58}, Jun^{1,2,58}, Jul^{1,2,58}, Aug^{1,2,3,58}, Sep^{1,2} (2014^{1,2}). Collections: BBSL, INHS, PCYU
270. ‡ *Ceratina (Zadontomerus) sequoiae* Michener, 1936. County records: Whitman⁵⁸. Seasonality: Apr⁵⁸, May⁵⁸ (1919⁵⁸)

Xylocopini

Genus *Xylocopa* Latreille

271. †* *Xylocopa (Xylocopoides) virginica* (Linnaeus, 1771). County records: **Benton**¹, **King**¹. Seasonality: Apr¹, May¹ (2024¹). Collections: iNaturalist

Colletidae: Colletinae: Colletini

Genus *Colletes* Latreille

272. *Colletes compactus hesperius* Swenk, 1906. County records: Walla Walla^{37,84}, Whitman^{37,84,126}, Yakima^{37,84}. Collections: NMNH. **Holotype**. USA, Washington, Whitman County, Almota
273. *Colletes consors* Cresson, 1868. County records: **Clallam**³, Okanogan^{1,2,3,59}, **Yakima**³. Seasonality: Jul^{1,2,3} (2014³). Collections: BBSL, JRYA, SEMC. Floral records: HYDROPHYLLACEAE: *Phacelia leptosepala*^{3,59}
- 273a. *Colletes consors pascoensis* Cockerell, 1898. County records: Franklin^{53,115}, Okanogan^{1,2}, Walla Walla^{1,2,3}, Yakima^{1,2,3,37,84}. Seasonality: May^{1,2,3}, Jul^{1,2,3,37,84},

- Aug^{1,2} (2012^{1,2}). Collections: NMNH. **Holotype**. USA, Washington, Franklin County, Pasco. Floral records: HYDROPHYLLACEAE: *Phacelia*⁸⁴
274. ‡ *Colletes delodontus* Viereck, 1903. County records: Franklin¹¹⁵. Seasonality: May¹¹⁵ (1896¹¹⁵)
275. *Colletes fulgidus* Swenk, 1904. County records: Asotin^{1,2,4}, Benton^{1,2}, Garfield⁴⁶, Grant¹²⁶, Jefferson^{1,2}, Klickitat^{1,2}, Okanogan^{1,2,3,4}, San Juan^{22,136}, Spokane^{1,2}, Walla Walla^{1,2}, Whitman^{6,126}, Yakima¹²⁶. Seasonality: May^{1,2}, Jun^{1,2,46}, Jul^{1,2}, Aug^{1,2,6}, Sep^{1,2}, Oct^{1,2} (2017¹³⁶). Collections: BBSL, PCYU, WSDA. Floral records: ASTERACEAE: *Achillea millefolium*^{3,59}, *Anaphalis margaritacea*⁵⁹, *Crepis capillaris*¹³⁶, *Erigeron speciosus*^{3,59}; CAPRIFOLIACEAE: *Symphoricarpos albus*¹³⁶; PLANTAGINACEAE: *Penstemon washingtonensis*⁵⁹
- 275a. *Colletes fulgidus fulgidus* Swenk, 1904. County records: Benton^{1,2,3}, Clallam^{1,2,3}, Cowlitz^{1,2,3}, Ferry^{1,2,3}, Garfield^{1,2,3}, Grays Harbor^{1,2,3}, Kittitas^{1,2,3}, Klickitat^{1,2}, Okanogan⁵⁹, San Juan^{1,2}, Spokane^{1,2}, Walla Walla^{1,2,3}, Whitman^{1,2,3}. Seasonality: May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2} (2012^{1,2}). Collections: AMNH, BBSL, PWRC, SEMC. Floral records: FABACEAE: *Onobrychis viciifolia*³
276. *Colletes gypsicolens* Cockerell, 1897. County records: Benton^{1,2,3}, Franklin^{1,2,3}, Yakima^{37,84}. Seasonality: Sep^{1,2,3}, Oct^{1,2} (1994^{1,2,3}). Collections: BBSL, SEMC
277. *Colletes hyalinus* Provancher, 1888. County records: Pacific^{1,2,3}, Pend Oreille^{37,84}, San Juan¹³⁶. Seasonality: Jul^{1,2}, Aug^{1,2,3} (2017¹³⁶). Collections: BBSL. Floral records: ROSACEAE: *Potentilla anserina* ssp. *pacifica*¹³⁶
278. ‡ *Colletes inaequalis* Say, 1837. County records: Chelan^{1,2,3,37,84}, Douglas^{1,2}. Seasonality: May^{1,2,3} (1960^{1,2}). Collections: SEMC
279. *Colletes kincaidii* Cockerell, 1898. County records: Asotin^{1,2,4}, Jefferson^{1,2}, San Juan¹³⁶, Spokane^{1,2,53}, Thurston^{1,2,3,53,84,115}, Whitman^{1,2,3,53}. Seasonality: May^{1,2,3,4}, Jun^{1,2}, Jul^{1,2,3,53} (2017¹³⁶). Collections: BBSL, NMNH, PCYU, SEMC, UCRC. **Holotype**. USA, Washington, Thurston County, Olympia; 5 July 1946; *Potentilla haliastris*; Type No. 4270, USNM ENT 00534565. Floral records: ASTERACEAE: *Cirsium arvense*¹³⁶; CAPRIFOLIACEAE: *Symphoricarpos albus*¹³⁶; CAR-YOPHYLLACEAE: *Spergularia macrotheca*¹³⁶; ROSACEAE: *Potentilla*
280. *Colletes lutzi* Timberlake, 1943. County records: Benton^{1,2}, King⁵⁴, Spokane^{1,2,3}. Seasonality: May^{1,2}, Jun^{1,2,3}, Jul⁵⁴ (2015^{1,2}). Collections: BBSL
- 280a. *Colletes lutzi interior* Timberlake, 1951. County records: Benton^{1,2,3}, King^{37,84}, Kittitas^{1,2,3,37}, Whitman^{37,84}. Seasonality: Jul^{1,2,3}, Sep^{1,2,3} (1995^{1,2,3}). Collections: BBSL, SEMC
281. *Colletes nigrifrons* Titus, 1900. County records: Chelan³, Okanogan^{1,2,3,59}, Skagit³. Seasonality: Jul^{1,2}, Aug^{1,2,3} (2014³). Collections: BBSL, JRYA. Floral records: ASTERACEAE: *Achillea millefolium*⁵⁹; CELASTRACEAE: *Parnassia fimbriata*^{3,59}; CRASSULACEAE: *Sedum lanceolatum*⁵⁹; PLANTAGINACEAE: *Penstemon washingtonensis*⁵⁹; ROSACEAE: *Potentilla gracilis*^{3,59}
282. ‡ *Colletes paniscus sculleni* Timberlake, 1951. County records: Benton^{1,2,3}, Pierce^{37,54,84}, Yakima^{1,2,3,37,84}. Seasonality: May^{1,2,3}, Jul^{1,2,3,54} (1949^{1,2,3}). Collections: SEMC

- 283. *Colletes phaceliae* Cockerell, 1906.** County records: **Ferry**^{1,2}, **Franklin**^{1,2,53}, **Thurston**⁵³, **Walla Walla**^{1,2,3}. Seasonality: Apr^{1,2}, May⁵³, Jun^{1,2,3,53}, Jul⁵³, Aug^{1,2} (2012^{1,2}). Collections: BBSL, PCYU, SEMC. Floral records: ONAGRACEAE: *Chamerion angustifolium* ssp. *angustifolium*⁵³
- 284. *Colletes simulans* Cresson, 1868.** County records: **Thurston**¹¹⁵, **Yakima**¹²⁶. Seasonality: Jul¹¹⁵ (1896¹¹⁵). [= *Colletes tegularis* Swenk, 1905]
- 284a. *Colletes simulans nevadensis* Swenk, 1908.** County records: **Benton**^{1,2,3}, **Thurston**¹³³. Seasonality: Jul¹³³, Sep^{1,2,3} (2017¹³³). Collections: BBSL. Floral records: APIACEAE: *Daucus carota*¹³³; ASTERACEAE: *Senecio*³
- 285. *Colletes slevini* Cockerell, 1925.** County records: **Yakima**^{37,84}

Hylaeinae: Hylaeini

Genus *Hylaeus* Fabricius

- 286. *Hylaeus (Cephalylaeus) basalis* (Smith, 1853).** County records: **King**^{1,2}, **Kit-sap**^{1,2}, **Okanogan**^{1,2,3,59}, **San Juan**⁵, **Skagit**^{1,2}, **Thurston**^{1,2}. Seasonality: May^{1,2}, Jun^{1,2,3,5}, Jul^{1,2}, Aug¹ (2014¹). Collections: BBSL, UCMC. Floral records: ASTERACEAE: *Arnica sororia*⁵⁹; BRASSICACEAE: *Lepidium virginicum*⁵; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹; ROSACEAE: *Rosa nutkana* ssp. *nutkana*^{3,59}
- 287. *Hylaeus (Hylaeus) annulatus* (Linnaeus, 1758).** County records: **Chelan**³, **Clallam**³, **King**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Skagit**³. Seasonality: Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3} (2014³). Collections: AMNH, BBSL, JRYA. [= *Hylaeus ellipticus* (Kirby, 1837)]. Floral records: ASTERACEAE: *Agoseris glauca* var. *dasycephala*⁵⁹, *Anaphalis margaritacea*⁵⁹, *Taraxacum officinale*^{3,59}; FABACEAE: *Trifolium repens*^{3,59}; GERANIACEAE: *Geranium viscosissimum* var. *viscosissimum*^{3,59}; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹; ROSACEAE: *Potentilla gracilis*^{3,59}, *Rosa nutkana* ssp. *nutkana*⁵⁹
- 288. *Hylaeus (Hylaeus) conspicuus* (Metz, 1911).** County records: **Klickitat**^{1,2}, **Spokane**^{1,2}, **Whitman**⁵⁵. Seasonality: Aug^{1,2} (2011^{1,2}). Collections: BBSL, UCDC
- 289. *Hylaeus (Hylaeus) granulatus* (Metz, 1911).** County records: **Whitman**³². Seasonality: May³², Jun³², Jul³² (2013³²)
- 290. †* *Hylaeus (Hylaeus) leptcephalus* (Morawitz, 1871).** County records: **Benton**⁶, **Douglas**^{1,2,3}, **Walla Walla**^{1,2}, **Yakima**⁶. Seasonality: May⁶, Jun^{1,2}, Jul⁶, Aug^{1,2,3} (2023⁶). Collections: BBSL, iNaturalist, WSDA. [= *Hylaeus bisinuatus* Förster, 1871]
- 291. *Hylaeus (Hylaeus) mesillae* (Cockerell, 1896).** County records: **Benton**^{1,2,6}, **Chelan**⁶, **Grant**⁶, **Okanogan**⁶, **Walla Walla**^{6,71}, **Yakima**⁶. Seasonality: May⁶, Jun^{1,2,6}, Jul⁶, Aug⁶, Sep⁶ (2023⁶). Collections: BBSL, WSDA
- 291a. *Hylaeus (Hylaeus) mesillae cressoni* (Cockerell, 1907).** County records: **Benton**^{1,2,3}, **Walla Walla**^{1,2,3}. Seasonality: Apr^{1,2,3}, Jun^{1,2}, Sep^{1,2,3} (1997^{1,2,3}). Collections: BBSL
- 292. *Hylaeus (Hylaeus) rudbeckiae* (Cockerell and Casad, 1895).** County records: **Chelan**⁶, **Klickitat**^{1,2}, **Okanogan**^{1,2,3,6,59}, **Spokane**^{1,2}. Seasonality: Jun^{1,2}, Jul^{1,2,6}, Aug^{1,2,3,6}, Sep^{1,2} (2023⁶). Collections: BBSL, WSDA

293. †‡ *Hylaeus (Hylaeus) verticalis* (Cresson, 1869). County records: **Kittitas**^{2,3}. Seasonality: Jul^{2,3} (1934^{2,3}). Collections: BBSL
294. †‡ *Hylaeus (Paraprosopis) calvus* (Metz, 1911). County records: **Chelan**^{1,2,3}. Seasonality: Jul^{1,2,3} (1949^{1,2,3}). Collections: SEMC
295. *Hylaeus (Paraprosopis) coloradensis* (Cockerell, 1896). County records: **Clallam**³, **Kittitas**³, San Juan⁵⁵, Whitman⁵⁵. Seasonality: Aug³ (2014³). Collections: CAS, JRYA, UCMC, UCRC
296. *Hylaeus (Paraprosopis) nevadensis* (Cockerell, 1896). County records: **Chelan**³, King⁵⁵. Seasonality: Aug³ (2014³). Collections: JRYA
297. † *Hylaeus (Paraprosopis) wootoni* (Cockerell, 1896). County records: **Chelan**^{1,2,3}, **Clallam**³, **Ferry**^{1,2,3}, **Pierce**³, **Spokane**^{1,2}, **Yakima**⁶. Seasonality: Jun^{1,2}, Jul^{1,2,3}, Aug^{1,2,3,6} (2023⁶). Collections: BBSL, JRYA, SEMC, UCRC, WSDA
298. ‡ *Hylaeus (Prosopis) affinis* (Smith, 1853). County records: Whitman⁸³. Seasonality: Jul⁸³ (1957⁸³). Collections: BBSL, SEMC, UCDC. Comments: Snelling (1966) indicates records from Pullman, WA in Garfield County; however, Pullman is located in Whitman County.
299. *Hylaeus (Prosopis) episcopalis* (Cockerell, 1896). County records: **Clallam**³, King⁸³, **Klickitat**^{1,2,3}, **Pacific**^{1,2,3}, **Spokane**^{1,2}, **Whitman**³. Seasonality: May^{1,2}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3} (2015^{1,2}). Collections: BBSL, JRYA, UCMC, UCRC
300. *Hylaeus (Prosopis) modestus citrinifrons* Say, 1837. County record: **Chelan**^{1,2,3}, **Clallam**³, **Cowlitz**^{1,2,3}, **Grays Harbor**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Pacific**^{1,2,3}, **Pierce**^{1,2,3}, San Juan¹³⁶, **Skagit**³, **Whatcom**^{1,2,3}, **Yakima**^{1,2,3}. Seasonality: Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3} (2017¹³⁶). Collections: BBSL, JRYA, SEMC, UCRC. Floral records: ASTERACEAE: *Anaphalis margaritacea*^{3,59}, *Crepis capillaris*¹³⁶, *Taraxacum officinale*^{3,59}; PLANTAGINACEAE: *Penstemon confertus*^{3,59}; ROSACEAE: *Potentilla anserina* ssp. *pacifica*¹³⁶, *P. gracilis*⁵⁹
301. †* *Hylaeus (Spatulariella) punctatus* (Brullé, 1832). County records: **Whitman**⁷, **Yakima**⁶. Seasonality: Aug^{6,7} (2023⁶). Collections: WSDA

Halictidae: Halictinae: Halictini

Genus *Agapostemon* Guerin-Meneville

302. *Agapostemon (Agapostemon) femoratus* Crawford, 1901. County records: **Adams**^{1,2,7}, **Asotin**⁷, Benton^{1,2,3,6,7,71}, **Chelan**⁷, **Douglas**^{1,2}, **Ferry**^{1,2,3}, **Franklin**^{1,2,3,7}, Garfield^{1,2,3,46}, **Grant**^{1,2,7}, **Island**⁷, **Kittitas**^{1,2,3}, **Mason**⁷, **Okanogan**^{1,2,3,7,59}, **Pacific**^{1,2,3}, **Spokane**^{1,2,3,7}, Walla Walla^{1,2,3,7,71}, **Whitman**^{1,2,3,7}, **Yakima**⁷. Seasonality: Apr^{1,2,3,7}, May^{1,2,3,7}, Jun^{1,2,3,46,7}, Jul^{1,2,3,6,7}, Aug^{1,2,3,7}, Sep^{1,2,3,7}, Oct^{1,2,7}, Nov⁷ (2022⁶). Collections: BBSL, EMEC, iNaturalist, INHS, OSUC, SEMC, TAMU, WSDA, WSUC. **Holotype**. USA, Washington Territory. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Arnica cordifolia*⁵⁹, *Erigeron speciosus*⁵⁹, *Senecio integerrimus*⁵⁹, *Rhaponticum repens*³; FABACEAE: *Astragalus*³; PLANTAGINACEAE: *Penstemon washingtonensis*⁵⁹

- 303. *Agapostemon (Agapostemon) texanus* Cresson, 1872.** County records: Adams^{1,2,7}, Benton^{1,2,3,7,71}, Clallam^{1,2,3}, Douglas⁷, Franklin^{1,2,7}, Garfield^{1,2,3,10,46}, Grant⁷, Island^{1,2,7}, Jefferson^{1,2}, King^{1,2,3,7}, Kitsap^{1,2,3}, Kittitas^{1,2,3}, Klickitat^{1,2}, Okanogan^{1,2,3,4,7,59}, Pacific^{1,2,3}, Pierce^{1,2,7}, San Juan^{1,2,3,5,6,7,124}, Skagit^{7,10}, Spokane^{1,2,7}, Thurston^{1,2,3,7}, Walla Walla^{1,2,3,7,71}, Whatcom^{1,2,3,7}, Whitman^{2,3,7,8}, Yakima^{1,2,3,7}. Seasonality: Mar^{1,2}, Apr^{1,2,3,7}, May^{1,2,3,5,7}, Jun^{1,2,3,5,7,46}, Jul^{1,2,3,5,7}, Aug^{1,2,3,4,6,7}, Sep^{1,2,3,7}, Oct^{1,2,3,7} (2022^{1,2}). Collections: AMNH, BBSL, BugGuide, EMEC, FMNH, iNaturalist, OSUC, PWRC, SEMC, UCMC, WSDA, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral Records: ASTERACEAE: *Anaphalis margaritacea*⁵, *Haplopappus*⁸, *Helianthus annuus*⁸; CONVULVACEAE: *Convolvulus*⁸; FABACEAE: *Astragalus racemosus*³, *Medicago sativa*⁸; ROSACEAE: *Rosa nutkana*⁵
- 303a. *Agapostemon (Agapostemon) angelicus* Cockerell, 1924/*texanus* Cresson, 1872.** County records: Asotin^{1,2}, Benton^{1,2,3}, Chelan^{1,2,3}, Columbia^{1,2}, Franklin^{1,2}, Garfield^{1,2,3}, Jefferson^{1,2}, King^{1,2}, Kitsap^{1,2,3}, Kittitas^{1,2}, Klickitat^{1,2}, Pierce^{1,2,3}, San Juan^{6,136}, Spokane^{1,2,3}, Stevens^{1,2}, Thurston¹³³, Walla Walla^{1,2,3}, Whatcom^{1,2}, Whitman². Seasonality: Mar^{1,2}, Apr^{1,2}, May^{1,2,133}, Jun^{1,2,3,6,133}, Jul^{1,2,3,6,133}, Aug^{1,2,6}, Sep^{1,2}, Oct^{1,2} (2020¹³³). Collections: BBSL, SEMC, TAMU, WSDA. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Crepis capillaris*¹³³, *Balsamorhiza deltoidea*¹³³, *Erigeron speciosus*¹³³, *Hypochaeris radicata*^{133,136}, *Leucanthemum vulgare*¹³³, *Microseris laciniata*¹³³, *Solidago missouriensis*¹³³; BRASSICACEAE: *Cakile maritima*¹³⁶; CAPRIFOLIACEAE: *Plectritis congesta*¹³³; CONVULVACEAE: *Calystegia soldanella*¹³⁶; FABACEAE: *Onobrychis arenaria*³, *Vicia sativa*¹³³; HYPERICACEAE: *Hypericum perforatum*¹³³; MALVACEAE: *Iliamna longisepala*³; OROBANCHACEAE: *Parentucellia viscosa*¹³³; ONAGRACEAE: *Clarkia amoena*¹³³; PLUMBAGINACEAE: *Armeria maritima*¹³³; ROSACEAE: *Potentilla gracilis*¹³³. Comments: Females of *A. angelicus* and *A. texanus* cannot be separated morphologically (Roberts 1973), so these uncertain records are combined here. No male *A. angelicus* have been recorded in Washington, suggesting these are most likely records of *A. texanus*.
- 304. *Agapostemon (Agapostemon) virescens* (Fabricius, 1775).** County records: Benton^{1,2,3,7}, Chelan^{1,2}, Douglas³, Garfield⁷, Jefferson^{1,2}, King^{1,2}, Klickitat^{1,2}, Lewis^{1,2}, Okanogan^{1,2,3,7,59}, Skagit^{1,2}, Snohomish^{1,2}, Spokane^{1,2,3,7}, Stevens^{1,2}, Thurston^{1,2,133}, Walla Walla^{1,2,3,7,71}, Whitman^{1,2,3,6,7,8}, Yakima^{1,2,7}. Seasonality: Apr^{1,2,7}, May^{1,2,7,133}, Jun^{1,2,3,7,133}, Jul^{1,2,3,6,7,133}, Aug^{1,2,3,6,7}, Sep^{1,2,3,7}, Oct^{1,2,7}, Nov⁷ (2022^{1,2}). Collections: BBSL, BugGuide, iNaturalist, INHS, SEMC, WSDA, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Balsamorhiza deltoidea*¹³³, *Cirsium vulgare*⁸, *Erigeron speciosus*¹³³, *Eriophyllum lanatum*¹³³, *Gaillardia aristata*^{8,133}, *Helianthus annuus*⁸, *Hypochaeris radicata*¹³³, *Microseris laciniata*¹³³, *Solidago simplex*¹³³, *Taraxacum officinale*¹³³; BRASSICACEAE: *Lepidium campestre*¹³³, *Sisymbrium altissimum*^{3,59}; FABACEAE: *Vicia*⁸, *V. hirsuta*¹³³; GENTIANACEAE: *Gentiana calycosa*⁸; GERANIACEAE: *Geranium dissectum*¹³³;

HYPERICACEAE: *Hypericum perforatum*¹³³; IRIDACEAE: *Sisyrinchium idahoense*¹³³; ONAGRACEAE: *Chamerion angustifolium*¹³³, *C. angustifolium* ssp. *angustifolium*⁸, *Clarkia amoena*¹³³; PLUMBAGINACEAE: *Armeria maritima*¹³³; ROSACEAE: *Rosa*⁸

Genus *Halictus* Latreille

- 305. *Halictus* (*Nealictus*) *farinosus* Smith, 1853.** County records: Benton^{1,2,3,71}, Chelan^{1,2,3}, Douglas³, Grant^{1,2,3}, Klickitat^{1,2}, Okanogan^{1,2,3,59}, Pierce^{1,2,3}, Spokane^{1,2,3,6}, Stevens^{1,2}, Walla Walla^{1,2,3,71}, Whitman^{1,2,3,6,8,119}, Yakima^{1,2,3,6,119}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3,6}, Aug^{1,2,3,6}, Sep^{1,2}, Oct^{1,2} (2022^{1,2}). Collections: BBSL, BugGuide, EMEC, iNaturalist, OSUC, SEMC, WSDA, WSUC. Floral records: APIACEAE: *Lomatium*⁸; ASTERACEAE: *Achillea millefolium*⁵⁹, *Agoseris glauca* var. *dasycephala*^{3,59}, *Anaphalis margaritacea*⁵⁹, *Arnica cordifolia*^{3,59}, *Erigeron speciosus*⁵⁹, *Helianthus annuus*⁸, *Senecio triangularis*⁵⁹, *Solidago*⁸; BRASSICACEAE: *Brassica rapa*⁸, *Sisymbrium altissimum*⁸; ROSACEAE: *Malus domestica*⁸
- 306. *Halictus* (*Odontalictus*) *ligatus* Say, 1837.** County records: Adams^{1,2}, Benton^{1,2,3,71}, Chelan^{1,2,3}, Douglas^{1,2}, Grant^{1,2,3}, King^{1,2,3}, Klickitat^{1,2,3}, Okanogan^{1,2,3,59}, Spokane^{1,2,3,6}, Thurston^{1,2}, Walla Walla^{1,2,3,71}, Whitman^{1,2,6,8}, Yakima^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3,6}, Jul^{1,2,3,6}, Aug^{1,2,3,6}, Sep^{1,2}, Oct^{1,2} (2022^{1,2}). Collections: BBSL, BugGuide, FMNH, iNaturalist, WSDA, WSUC. Floral records: ASTERACEAE: *Anaphalis margaritacea*^{3,59}, *Cirsium arvense*⁸, *Haplopappus*⁸, *Helianthus annuus*⁸, *Solidago*⁸
- 307. *Halictus* (*Protohalictus*) *rubicundus* (Christ, 1791).** [= *Halictus lerouxii* var. *ruborum* Cockerell, 1898]. County records: Benton^{1,2}, Chelan^{1,2,3}, Clallam^{1,2,3}, Clark^{1,2,3}, Cowlitz^{1,2,3}, Douglas^{1,2}, Garfield⁴⁶, Jefferson^{1,2,3}, King^{1,2,3,119}, Kitsap^{1,2,3}, Kittitas^{2,3}, Klickitat^{1,2}, Mason^{1,2,3}, Okanogan^{1,2,3,59}, Pacific^{1,2,3}, Pierce^{1,2,3}, San Juan^{1,2,3,6,22,124,136}, Skagit^{1,2,3,10,124}, Snohomish^{1,2,3}, Spokane^{1,2,3,6}, Stevens^{1,2,3}, Thurston^{1,2,3,6,133}, Walla Walla^{1,2,3}, Whatcom^{1,2,3,6}, Whitman^{1,2,6,8}. Seasonality: Feb^{1,2}, Mar^{1,2,3}, Apr^{1,2,133}, May^{1,2,133}, Jun^{1,2,3,6,133}, Jul^{1,2,3,6}, Aug^{1,2,3,6}, Sep^{1,2,3}, Oct^{1,2} (2022^{1,2}). Collections: AMNH, BBSL, BugGuide, FMNH, iNaturalist, JRYA, PWRC, TAMU, WSDA, WSUC. Floral records: APIACEAE: *Lomatium*⁸; AS- PARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Achillea millefolium*⁵⁹, *Cirsium arvense*⁸, *Erigeron speciosus*⁵⁹, *Hypochaeris radicata*¹³⁶, *Senecio triangularis*^{3,59}, *Taraxacum officinale*^{8,133}; BRASSICACEAE: *Sisymbrium altissimum*^{3,59}; CAMPANULACEAE: *Campanula rotundifolia*⁵⁹; CONVULVACEAE: *Calystegia soldanella*¹³⁶; CRASSULACEAE: *Sedum lanceolatum*⁵⁹; FABACEAE: *Lupinus sericeus*⁵⁹, *Trifolium pratense*³, *T. repens*^{8,59}; OROBANCHACEAE: *Pentstemon viscosus*¹³³; RANUNCULACEAE: *Ranunculus*⁸; ROSACEAE: *Fragaria virginiana*¹³³, *Rubus bifrons*¹³⁶
- 308. *Halictus* (*Seladonia*) *confusus* Smith, 1853.** County records: Chelan³, Clallam³, Jefferson^{1,2}, King^{1,2,3}, Klickitat^{1,2}, Pacific^{1,2}, Pierce^{1,2,3}, San Juan^{5,6}, Spokane^{1,2}, Thurston^{1,2,3,133}, Whatcom^{1,2,3}, Whitman⁶. Seasonality: Apr¹³³,

May^{1,2,5,133}, Jun^{1,2,3,6,133}, Jul^{1,2,3,6,133}, Aug^{1,2,3,6} (2020¹³³). Collections: AMNH, BBSL, BugGuide, EMEC, iNaturalist, JRYA, OSUC, PCYU, SEMC, WSDA. Floral records: ASPARAGACEAE: *Brodiaea coronaria*¹³³, *Camassia quamash*¹³³; ASTERACEAE: *Crepis capillaris*¹³³, *Hypochaeris radicata*¹³³, *Leucanthemum vulgare*¹³³; BRASSICACEAE: *Lepidium campestre*¹³³, *Teesdalia nudicaulis*¹³³; CARYOPHYLLACEAE: *Cerastium arvense*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³; FABACEAE: *Lupinus bicolor*¹³³, *Trifolium repens*¹³³; IRIDACEAE: *Sisyrinchium idahoense*¹³³; LAMIACEAE: *Prunella vulgaris*¹³³; PLANTAGINACEAE: *Collinsia grandiflora*¹³³; POLEMONIACEAE: *Gilia capitata*¹³³; ROSACEAE: *Fragaria virginiana*¹³³, *Potentilla gracilis*¹³³

309. *Halictus (Seladonia) tripartitus* Cockerell, 1895. County records: Benton^{1,2,3,71}, Clallam^{1,2}, Douglas^{1,2}, Jefferson^{1,2}, Kittitas^{2,3}, Klickitat^{1,2}, Okanogan^{1,2,3,59}, San Juan^{1,2,3,5,6,124}, Spokane^{1,2,3}, Stevens^{1,2}, Thurston¹³³, Walla Walla^{1,2,3,71}, Whitman^{1,2,3,6,8}, Yakima^{1,2}. Seasonality: Mar^{1,2}, Apr^{1,2}, May^{1,2,3,133}, Jun^{1,2,3,133}, Jul^{1,2,3,5,6}, Aug^{1,2,3,6}, Sep^{1,2}, Oct^{1,2} (2022^{1,2}). Collections: AMNH, BBSL, BugGuide, iNaturalist, INHS, TAMU, UMNH, WSDA, WSUC. Floral records: APIACEAE: *Lomatium*⁸; ASPARAGACEAE: *Triteleia hyacinthina*¹³³; ASTERACEAE: *Cirsium arvense*⁸, *Erigeron speciosus*¹³³, *Eriophyllum lanatum*¹³³, *Leucanthemum vulgare*¹³³, *Microseris laciniata*¹³³, *Solidago*⁸, *Taraxacum officinale*⁸; CAMPANULACEAE: *Campanula rotundifolia*¹³³; FABACEAE: *Trifolium repens*⁸; OROBANCHACEAE: *Parentucellia viscosa*¹³³; PLANTAGINACEAE: *Collinsia parviflora*⁸; PLUMBAGINACEAE: *Armeria maritima*¹³³; RANUNCULACEAE: *Ranunculus*⁸; ROSACEAE: *Fragaria virginiana*¹³³, *Potentilla gracilis*^{3,59,133}, *Rosa*⁸, *Rubus ulmifolius*⁵

310. † *Halictus (Seladonia) virgatellus* Cockerell, 1901. County records: Chelan³, Clallam³, Pierce^{1,2,3}, Stevens^{1,2}, Whatcom³. Seasonality: May^{1,2,3}, Jun^{1,2}, Jul^{1,2}, Aug³ (2014^{1,2,3}). Collections: BBSL, EMEC, JRYA

Genus *Lasioglossum* Curtis

311. † *Lasioglossum (Dialictus) albipenne* (Robertson, 1890). County records: San Juan^{1,2,3}, Whitman⁷. Seasonality: May⁷, Jun⁷, Jul^{1,2,7}, Aug⁷, Sep⁷ (2011^{1,2}). Collections: PWRC, WSUC
312. *Lasioglossum (Dialictus) albohirtum* (Crawford, 1907). County records: Adams⁷, Benton^{1,2,3,6,7,71}, Columbia^{1,2,4,38}, Grant⁷, Okanogan⁷, Pierce⁷, Walla Walla^{1,2,3,7,71}, Whitman⁷, Yakima^{7,38}. Seasonality: Apr⁷, May^{1,2,4,6,7,38}, Jun⁷, Jul^{1,2,7}, Aug^{1,2,3,7}, Sep^{1,2,3,7}, Oct^{1,2,7} (2022⁶). Collections: BBSL, PCYU, WSDA, WSUC. Floral records: FABACEAE: *Melilotus officinalis*³⁸; Ericameria *nauseosa*³⁸, *Eriogonum*³⁸
313. † *Lasioglossum (Dialictus) brunneiventre* (Crawford, 1907). County records: Benton⁷, Walla Walla⁷, Whitman⁷, Yakima⁷. Seasonality: May⁷, Jun⁷, Jul⁷, Aug⁷, Sep⁷, Oct⁷ (2014⁷). Collections: WSUC
314. † *Lasioglossum (Dialictus) cressonii* (Robertson, 1890). County records: King^{1,2,3}, Skagit⁷, Snohomish⁷, Stevens⁷, Whatcom^{6,7}, Whitman⁷. Seasonality:

- Apr⁷, Jun⁷, Jul^{1,2,3,6}, Aug⁶, Sep⁷, Oct⁷ (2011^{1,2,3}). Collections: AMNH, WSDA, WSUC
315. *Lasioglossum (Dialictus) dashwoodi* Gibbs, 2010. County records: Garfield³⁸, Klickitat⁷, Okanogan³⁸, Spokane⁷, Whitman⁷, Yakima⁷. Seasonality: May^{7,38}, Jun⁷, Jul⁷, Aug³⁸ (2022⁷). Collections: BBSL, PCYU, WSUC. **Allotype**. USA, Washington, Okanogan County, 1 mi E Muckamuck Hill, 48.601661°N, -119.765108°W; 9 August 2004; J Wilson. **Paratype**. USA, Washington, Okanogan County, 25 km W Clarkston, Hwy 12, 805 m; 29 May 2007; Gibbs and Sheffield
316. † *Lasioglossum (Dialictus) diversopunctatum* (Ellis, 1914). County records: Benton⁷, Yakima⁷. Seasonality: Jun⁷, Jul⁷, Aug⁷ (2014⁷). Collections: WSUC
317. *Lasioglossum (Dialictus) helianthi* (Cockerell, 1916). County records: Adams⁷, Benton⁷, Grant⁷, Grays Harbor⁶, Okanogan⁷, Pierce¹²², Walla Walla⁷, Whitman⁷, Yakima⁷. Seasonality: Apr^{7,122}, May⁷, Jun⁷, Jul⁷, Aug^{6,7} (2020⁶). Collections: PCYU, WSDA, WSUC. [= *Lasioglossum (Dialictus) imbrex* Gibbs, 2010].
318. † *Lasioglossum (Dialictus) hyalinum* (Crawford, 1907). County records: Adams⁷, Benton⁷, Chelan⁷, Grant⁷, Yakima⁷. Seasonality: Mar⁷, Apr⁷, May⁷, Jun⁷, Jul⁶, Aug⁷, Oct⁷ (2022⁶). Collections: WSDA, WSUC
319. *Lasioglossum (Dialictus) incompletum* (Crawford, 1907). County records: Asotin⁷, Benton^{1,2,3,7,71}, Chelan⁷, Garfield^{1,2,3,4}, Grant⁷, Island⁷, Kittitas⁷, Klickitat⁷, San Juan^{1,2,3,124}, Spokane⁷, Walla Walla^{1,2,3,6,7,71}, Whitman⁷, Yakima⁷. Seasonality: Mar⁷, Apr⁷, May^{1,2,3,4,7}, Jun^{1,2,7}, Jul^{1,2,6,7}, Aug^{1,2,3,7}, Sep^{1,2,7}, Oct^{1,2,7} (2022⁶). Collections: BBSL, PCYU, PWRC, WSDA, WSUC
320. *Lasioglossum (Dialictus) knereri* Gibbs, 2010. County records: Asotin⁷, Clark⁷, Island⁷, King^{1,2,3}, Klickitat⁷, Okanogan^{1,2,3,38}, San Juan^{1,2,3,7,124}, Skagit⁷, Spokane⁷, Whitman⁷, Yakima⁷. Seasonality: Apr⁷, May^{1,2,7}, Jun^{1,2,3,7}, Jul^{1,2,38,7}, Aug^{1,2,3,7} (2011^{1,2,124}). Collections: BBSL, PWRC, WSUC. Floral records: BRASSICACEAE: *Smelowskia calycina*³, CAMPANULACEAE: *Campanula rotundifolia*³⁸
321. *Lasioglossum (Dialictus) laevissimum* (Smith, 1853). County records: Benton⁷, Clark⁷, Grant⁷, Grays Harbor⁶, Island⁷, King⁷, Okanogan⁷, Pacific⁷, Pierce^{6,7}, San Juan⁶, Skagit¹⁰, Snohomish⁷, Stevens⁷, Whatcom⁶, Whitman⁷. Seasonality: Apr⁷, May⁷, Jun^{6,7}, Jul^{6,7}, Aug^{6,7}, Sep^{6,7}, Oct⁷ (2021⁶). Collections: WSDA, WWUC, WSUC
322. † *Lasioglossum (Dialictus) longicorne* (Crawford, 1907). County records: San Juan^{1,2}. Seasonality: May^{1,2} (2011^{1,2}). Collections: PWRC. Comments: This species plausibly occurs in Washington, but the specimens were not seen by the authors and its taxonomy is known to be uncertain (the taxon is part of the difficult *Lasioglossum viridatum* species complex.)
323. *Lasioglossum (Dialictus) macroprosopum* Gibbs, 2010. County records: Benton⁷, Kittitas⁷, Skagit¹⁰, Spokane⁷, Walla Walla⁷, Whitman⁷, Yakima⁷. Seasonality: Mar⁷, Apr⁷, May⁷, Jun⁷, Jul⁷, Aug⁷, Oct⁷ (2014⁷). Collections: WSUC, WWUC

324. *Lasioglossum (Dialictus) marinense* (Michener, 1936). County records: **Aso-tin**⁷, **Okanogan**^{1,2,3,38,59}, **San Juan**^{1,2,3}, **Stevens**⁷. Seasonality: Jun^{1,2,3,7,38}, Jul^{1,2,7}, Aug^{1,2,3,38} (2011^{1,2}). Collections: BBSL, PCYU, PWRC, WSUC. Floral records: ASTERACEAE: *Taraxacum officinale*⁵⁹; ROSACEAE: *Rosa nutkana* ssp. *nutkana*³
325. *Lasioglossum (Dialictus) nevadense* (Crawford, 1907). County records: **Aso-tin**⁷, **Benton**⁷, **Chelan**⁷, **Clark**⁷, **Cowlitz**⁷, **Okanogan**^{1,2,3,7,38,59}, **San Juan**^{1,2,3,124}, **Spokane**⁷, **Walla Walla**⁷, **Whitman**⁷, **Yakima**⁷. Seasonality: Apr⁷, May^{1,2,7}, Jun^{1,2,7,38}, Jul^{1,2,3,7,38}, Aug^{1,2,3,7} (2014⁷). Collections: BBSL, PCYU, PWRC, WSUC. Floral records: ASTERACEAE: *Cirsium vulgare*³
326. † *Lasioglossum (Dialictus) nigroviride* (Graenicher, 1911). County records: **Chelan**³, **Pend Oreille**⁷. Seasonality: Jun⁷, Aug³ (2014³). Collections: JRYA, WSUC
327. † *Lasioglossum (Dialictus) novascotiae* (Mitchell, 1960). County records: **Benton**⁷, **Okanogan**⁷, **Spokane**⁷, **Stevens**⁷, **Walla Walla**⁷, **Whatcom**⁷, **Whitman**⁷, **Yakima**⁷. Seasonality: Apr⁷, May⁷, Jun⁷, Jul⁷, Aug⁷, Sep⁷ (2013⁷). Collections: WSUC. Floral records: ASTERACEAE: *Taraxacum officinale*⁷; FABACEAE: *Medicago sativa*⁷
328. *Lasioglossum (Dialictus) pacatum* (Sandhouse, 1924). County records: **Okanogan**^{1,2,3,59}, **San Juan**^{1,2,3,124}. Seasonality: May^{1,2}, Jun^{1,2}, Jul^{1,2,3}, Aug^{1,2,3} (2011^{1,2,124}). Collections: BBSL, PWRC. Floral records: ASTERACEAE: *Taraxacum officinale*³
329. † *Lasioglossum (Dialictus) pallidellum* (Ellis, 1914). County records: **Benton**⁷, **Grant**⁷. Seasonality: May⁷, Jul⁷, Oct⁷ (1995⁷). Collections: WSUC. Floral records: SARCOBATAEAE: *Sarcobatus vermiculatus*⁷
330. *Lasioglossum (Dialictus) perdifficile* (Cockerell, 1895). County records: **Benton**^{1,2,3,71}, **Walla Walla**^{1,2,3,71}. Seasonality: Aug^{1,2}, Sep^{1,2,3} (1997^{1,2,3}). Collections: BBSL. Comments: *Lasioglossum perdifficile* belongs to a difficult complex that includes multiple undescribed species. Washington records of this species (originally described from New Mexico) are likely misidentifications or based on over-inclusive species concepts. Several Washington specimens have been examined and they are believed to comprise two species, one of which may be a morphological variant within *L. yukonae* Gibbs, 2010, and the other of which is probably undescribed. Further taxonomic work is needed to resolve this complex.
331. †‡ *Lasioglossum (Dialictus) platyparius* (Robertson, 1895). County records: **Whitman**⁷. Seasonality: May⁷ (1917⁷). Collections: WSUC. Comments: This social parasite is primarily distributed east of the Rocky Mountains. The Washington record, based on a single specimen collected at Wawawai in 1917, represents a significant and unexpected range extension both for the species and for socially parasitic *Dialictus* in general. But considering that Whitman County is one of the most well-collected regions in Washington and *L. platyparius* has not been re-collected in over 100 years, it is possible that the species is not permanently established in Washington, or it has been extirpated.
332. *Lasioglossum (Dialictus) prasinogaster* Gibbs, 2010. County records: **Adams**⁷, **Benton**⁷, **Garfield**³⁸, **Franklin**⁷, **Grant**⁷, **Klickitat**⁷, **Okanogan**^{1,2,3,59}, **Spokane**⁷,

- Walla Walla⁷, Whitman⁷, Yakima⁷.** Seasonality: Apr⁷, May^{7,38}, Jun⁷, Jul^{1,2,3,7}, Aug⁷, Sep⁷ (2013⁷). Collections: BBSL, PCYU, WSUC. Floral records: ASTERACEAE: *Chrysothamnus⁷*, *Taraxacum³⁸*
- 333. *Lasioglossum (Dialictus) pruinosum* (Robertson, 1892).** County records: Benton^{1,2,3,7,71}, Douglas⁷, Garfield⁷, Okanogan⁷, Walla Walla^{1,2,3,7,71}, Whitman⁷, Yakima⁷. Seasonality: Apr⁷, May^{1,2,7}, Jun^{1,2,7}, Jul^{1,2,3,7}, Aug^{1,2,3,7}, Sep^{1,2,7}, Oct^{1,2} (2014⁷). Collections: BBSL, WSUC
- 334. *Lasioglossum (Dialictus) punctatoventre* (Crawford, 1907).** County records: Benton⁷, Okanogan^{1,2,3,59}, Spokane⁷, Whitman⁷. Seasonality: May⁷, Jun⁷, Jul^{1,2,3,7}, Aug^{1,2,7} (2011^{1,2}). Collections: BBSL, PWRC, WSUC. Floral records: ROSACEAE: *Potentilla gracilis⁵⁹*
- 335. † *Lasioglossum (Dialictus) reasbeckae* Gibbs, 2010.** County records: Thurston^{1,2,4}. Seasonality: May⁷, Jun^{1,2,4} (2009^{1,2,4}). Collections: PCYU, WSUC. Comments: A specimen in WSUC labeled “Rock Creek” was probably collected in Spokane County, based on other specimens from the collector (Robin D. Gray). However, there are at least 33 Rock Creeks in Washington, so the exact location is unknown.
- 336. *Lasioglossum (Dialictus) ruidosense* (Cockerell, 1897).** County records: Asotin⁷, Benton⁷, Clallam³, Clark⁷, Grant⁷, Okanogan^{1,2,3,59}, Skagit⁷, Spokane⁷, Stevens⁷, Thurston^{1,2,4,7}, Whitman⁷. Seasonality: May⁷, Jun^{1,2,3,4,7}, Jul⁷, Aug^{1,2,3,7} (2014³). Collections: BBSL, JRYA, PCYU, WSUC. Floral records: ASTERACEAE: *Achillea millefolium³*, *Taraxacum officinale⁵⁹*
- 337. *Lasioglossum (Dialictus) sandhousiellum* Gibbs, 2010.** County records: Okanogan^{3,59}. Seasonality: Jul³ (2004^{3,59}). Floral records: ASTERACEAE: *Achillea millefolium⁵⁹*, *Taraxacum officinale⁵⁹*; POLEMONIACEAE: *Ipomopsis aggregata* ssp. *aggregata⁵⁹*
- 338. *Lasioglossum (Dialictus) sedi* (Sandhouse, 1924).** County records: Asotin⁷, Chelan⁷, King^{1,2,3}, Klickitat^{1,2,3}, Okanogan^{1,2,3,38,59}, Whitman⁷, Yakima⁷. Seasonality: Apr^{1,2,3,7}, May⁷, Jun^{1,2,3,7,38}, Jul^{1,2,3,7,38}, Aug^{1,2} (2004^{1,2,38,59}). Collections: AMNH, BBSL, PCYU, WSUC. Floral records: ASTERACEAE: *Erigeron speciosus^{3,59}*; CAMPANULACEAE: *Campanula rotundifolia^{3,38,59}*; CELASTRACEAE: *Parnassia fimbriata⁵⁹*; CRASSULACEAE: *Sedum lanceolatum⁵⁹*, *S. stenopetalum³⁸*; HYDROPHYLLACEAE: *Phacelia leptosepala³⁸*; PLANTAGINACEAE: *Penstemon davidsonii* var. *davidsonii⁵⁹*; ROSACEAE: *Rosa nutkana* ssp. *nutkana^{3,59}*
- 339. *Lasioglossum (Dialictus) tegulariforme* (Crawford, 1907).** County records: Benton^{1,2,3,71}, Grant⁷, Stevens¹²², Walla Walla^{1,2,3,71}, Whitman^{1,2}. Seasonality: May^{1,2}, Jun^{1,2}, Jul⁷, Aug^{1,2,3,122}, Sep^{1,2}, Oct^{1,2} (2011¹²²). Collections: BBSL, EMEC, FWSE, WSUC. Comments: Prior to 2010, *L. helianthi* was considered a synonym of *L. tegulariforme* (Gibbs 2010 [as *L. imbrex*]; Gardner and Gibbs 2022). As the specimen from Whitman County was collected prior to 2010 and has not been examined, it is possible that this specimen could be *L. helianthi*.
- 340. *Lasioglossum (Dialictus) tenax* (Sandhouse, 1924).** County records: Okanogan^{1,2,3,59}, Pierce^{1,2,4}, Thurston^{1,2,4}. Seasonality: May^{1,2,4}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,4}

(2009^{1,2,4}). Collections: BBSL, PCYU. Floral records: ASTERACEAE: *Achillea millefolium*⁵⁹, *Cirsium vulgare*⁵⁹; CAMPANULACEAE: *Campanula rotundifolia*³. Comments: All Washington specimens of *L. tenax* that have been examined so far have turned out to be an undescribed species closely related to *L. tenax*. This species is distinguished from the true *L. tenax* by the smooth, shiny, sparsely punctate mesepisternum (contrasted with the dull, rugulose mesepisternum of *L. tenax*). It seems likely that the true *L. tenax* does not occur in Washington, and all published records actually correspond to this undescribed species. The undescribed species will be described in a forthcoming publication.

341. *Lasioglossum (Dialictus) zephyrus* (Smith, 1853). County records: Benton⁷, Clark^{1,2,79}, Spokane⁷, Walla Walla⁷, Whitman^{1,2,7,79}, Yakima⁷. Seasonality: Apr⁷, May^{1,2,7,79}, Jun⁷, Jul^{1,2,7,79}, Aug⁷, Sep⁷, Oct⁷ (2014⁷). Collections: CAS, UCDC, WSUC
342. † *Lasioglossum (Evyllaes) argemonis* (Cockerell, 1897). County records: Asotin⁷, Chelan⁷, Columbia⁷, Whitman⁷, Yakima⁷. Seasonality: Apr⁷, May⁷, Jul⁷ (1980⁷). Collections: WSUC
343. † *Lasioglossum (Evyllaes) robustum* (Crawford, 1907). County records: Clark⁷. Seasonality: Jul⁷ (1970⁷). Collections: WSUC
344. † *Lasioglossum (Hemihalictus) aspilurus* (Cockerell, 1925). County records: Benton⁷, Walla Walla⁷, Whitman⁷. Seasonality: Apr⁷, May⁷ (1973⁷). Collections: WSUC
345. †* *Lasioglossum (Hemihalictus) buccale* (Pérez, 1903). County records: Spokane⁷. Seasonality: Jul⁷, Aug⁷ (1970⁷). Collections: WSUC
346. † *Lasioglossum (Hemihalictus) glabriventre* (Crawford, 1907). County records: Benton⁷, Cowlitz⁷, Garfield⁷, Klickitat^{1,2}, Spokane^{1,2,7}, Walla Walla⁷, Whitman⁷, Yakima⁷. Seasonality: May^{1,2,7}, Jun^{1,2,7}, Jul^{1,2,7}, Aug^{1,2,7}, Sep^{1,2} (2015^{1,2}). Collections: BBSL, WSUC
347. *Lasioglossum (Hemihalictus) inconditum* (Cockerell, 1916). County records: Asotin⁷, Clallam⁷, Cowlitz⁷, Island^{7,80}, King⁸⁰, Klickitat⁷, Lewis⁷, San Juan⁷, Skagit⁷, Spokane⁷, Stevens⁷, Thurston⁸⁰, Whitman⁸⁰, Yakima⁷. Seasonality: Apr⁷, May⁷, Jun⁷, Jul⁷, Aug⁷, Sep⁷ (1985⁷). Collections: WSUC
348. *Lasioglossum (Hemihalictus) kincaidii* (Cockerell, 1898). County records: Benton⁷, Clark⁷, Grant⁷, Jefferson⁷, King⁷, Klickitat^{1,2}, Pacific⁷, Pierce^{1,2,4}, Spokane^{1,2}, Thurston¹¹⁹, Walla Walla^{1,2,7}, Whitman⁷, Yakima⁷. Seasonality: Apr^{1,2}, May^{1,2,7}, Jun^{1,2,7}, Jul^{1,2,4,7}, Aug⁷ (2015^{1,2}). Collections: BBSL, PCYU, WSUC. [= *Halictus kincaidii* Cockerell, 1898]
349. *Lasioglossum (Hemihalictus) ovaliceps* (Cockerell, 1898). County records: Asotin⁷, Chelan⁷, Clark⁷, King^{1,2,3}, Lewis⁷, Okanogan⁷, San Juan²², Snohomish^{1,2,3}, Thurston^{1,2,7}, Whitman⁷, Yakima^{1,2,4,7}. Seasonality: Apr^{1,2,7}, May^{1,2,3,4,7}, Jun^{1,2,7}, Jul^{1,2,7}, Aug^{1,2,3,7}, Sep⁷, Oct^{1,2}, Nov^{1,2} (2022^{1,2}). Collections: iNaturalist, PCYU, WSUC. Floral records: ASTERACEAE: *Hypochaeris radicata*³
350. † *Lasioglossum (Hemihalictus) sequoiae* (Michener, 1936). County records: San Juan^{1,2,3}. Seasonality: May^{1,2}, Jul^{1,2} (2011^{1,2}). Collections: PWRC

351. †* *Lasioglossum (Hemihalictus) villosulum* (Kirby, 1802). County records: King⁷, Snohomish⁷. Seasonality: May⁷, Jun⁷, Jul⁷ (2019⁷). Collections: WSUC
352. *Lasioglossum (Lasioglossum) anhypops* McGinley, 1986. County record: Asotin⁸¹, Chelan^{3,7}, Klickitat^{1,2}, Okanogan^{1,2,3,59}, Pierce^{1,2,3,81}, Stevens^{1,2}, Whitman⁸¹. Seasonality: May^{1,2,7}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3} (2014^{1,2,3}). Collections: BBSL, JRYA, OSUC, WSUC. Floral records: ASTERACEAE: *Achillea millefolium*⁵⁹, *Anaphalis margaritacea*^{3,59}; FABACEAE: *Lupinus sericeus*^{3,59}
353. *Lasioglossum (Lasioglossum) athabascense* (Sandhouse, 1933). County records: Asotin⁷, Island⁸¹, King⁸¹, Okanogan^{1,2,3,59}, Pend Oreille^{7,81}, San Juan^{1,2,3,124}, Stevens^{7,81}, Whitman⁷. Seasonality: May^{1,2}, Jun^{1,2,3,7}, Jul^{1,2,7}, Sep⁷ (2011^{1,2,124}). Collections: BBSL, PWRC, WSUC. Floral records: ROSACEAE: *Potentilla gracilis*^{3,59}
354. *Lasioglossum (Lasioglossum) colatum* (Vachal, 1904). County records: Asotin⁸¹, King⁸¹, Skagit^{1,2,3}, Stevens⁸¹, Thurston⁸¹, Walla Walla^{7,81}, Whitman^{7,81}. Seasonality: May⁷, Jun⁷, Jul⁷, Aug^{1,2,7} (2013⁷). Collections: PWRC, WSUC
355. *Lasioglossum (Lasioglossum) egregium* (Vachal, 1904). County records: Chelan⁷, Columbia⁷, Cowlitz⁷, Grant⁷, Island⁷, Klickitat^{1,2}, Lincoln⁷, Mason^{7,81}, Okanogan^{1,2,3,7,59,81}, Pend Oreille^{7,81}, San Juan^{1,2,3,124}, Spokane^{1,2,7,81}, Thurston¹³³, Walla Walla^{1,2,7}, Whatcom³, Whitman^{1,2,3,4,6,7,81}, Yakima⁷. Seasonality: Apr⁷, May^{1,2,7,133}, Jun^{1,2,6,7,133}, Jul^{1,2,3,4,6,7}, Aug^{3,6,7}, Sep^{1,2}, Oct^{1,2}, Nov⁷ (2018¹³³). Collections: BBSL, JRYA, PWRC, WSDA, WSUC. Floral records: ASTERACEAE: *Leucanthemum vulgare*¹³³; PLUMBAGINACEAE: *Armeria maritima*¹³³
356. *Lasioglossum (Lasioglossum) heterorhinus* (Cockerell, 1930). County records: Thurston¹³³. Seasonality: May¹³³, Jul¹³³ (2019¹³³). Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Erigeron speciosus*¹³³
357. *Lasioglossum (Lasioglossum) mellipes* (Crawford, 1907). County records: Douglas⁷, Island^{7,81}, King⁸¹, Kittitas^{2,3,81}, Klickitat^{1,2}, Pierce^{1,2,3}, San Juan^{1,2,124,136}, Stevens^{1,2}, Walla Walla^{1,2}. Seasonality: Apr^{1,2,7}, May^{1,2,7}, Jun^{1,2}, Jul^{1,2,3} (2017¹³⁶). Collections: BBSL, PWRC, WSUC
358. *Lasioglossum (Lasioglossum) olympiae* (Cockerell, 1898). County records: Asotin^{7,81}, Island^{7,81}, Klickitat^{1,2}, Pierce⁸¹, San Juan^{1,2,3,5,6,7,81,124,136}, Spokane^{1,2,81}, Thurston^{81,119,130,133}, Walla Walla⁸¹, Whitman^{2,6}, Yakima⁷. Seasonality: May^{1,2,5,133}, Jun^{1,2,6,7,133}, Jul^{1,2}, Aug^{6,7}, Sep^{1,2} (2020¹³³). Collections: BBSL, NMNH, PWRC, WSDA, WSUC. [= *Halictus olympiae* Cockerell, 1898]. **Holotype**. USA, Washington, Thurston County, Olympia; 26 June 1896; USNM Type No. 29420. [= *Halictus olympiae* var. *subangustatus* Crawford, 1906]. Floral records: APIACEAE: *Heracleum sphondylium* ssp. *montanum*⁵, *Lomatium pugetensis*¹³³; ASTERACEAE: *Microseris laciniata*¹³³; GROSSULARIACEAE: *Ribes divaricatum*¹³⁶; PLUMBAGINACEAE: *Armeria maritima*¹³³; POLEMONIACEAE: *Gilia capitata*¹³³; ROSACEAE: *Potentilla gracilis*¹³³
359. *Lasioglossum (Lasioglossum) pacificum* (Cockerell, 1898). County records: Clark^{7,81}, Island^{7,81}, Jefferson^{1,2}, King^{7,81,119}, Kitsap⁸¹, Pacific^{1,2,3,81}, Pierce^{1,2,4,81}, San Juan^{1,2,3,5,7,124}, Skagit¹⁰, Thurston^{81,119,133}, Yakima^{1,2,3}. Seasonality: Apr⁷, May^{1,2,5,7,133}, Jun^{1,2,133}, Jul^{1,2,3,5}, Aug^{1,2,3,4}, Sep⁷ (2020¹³³). Collections: BBSL,

EMEC, PCYU, PWRC, SEMC, WSUC. [= *Halictus pacificus* Cockerell, 1898]. **Lectotype.** USA, Washington, Thurston County, Olympia; 24 June 1895. Floral records: APIACEAE: *Heracleum sphondylium* ssp. *Montanum*⁵; ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Crepis capillaris*⁵, *Microseris laciniata*¹³³; BRASSICACEAE: *Lepidium campestre*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³; FABACEAE: *Lupinus albicaulis*¹³³, *L. lepidus*¹³³; LAMIACEAE: *Prunella vulgaris*¹³³; PLUMBAGINACEAE: *Armeria maritima*¹³³; RANUNCULACEAE: *Ranunculus californicus*⁵; ROSACEAE: *Potentilla gracilis*¹³³; VIOLACEAE: *Viola adunca*¹³³

360. *Lasioglossum (Lasioglossum) pavonotus* (Cockerell, 1925). County records: Grays Harbor^{1,2,3,81}, Pacific^{1,2,3,7,81}. Seasonality: Jun⁷, Jul^{1,2,3,7}, Aug⁷ (1976⁷). Collections: BBSL, SEMC, WSUC

361. *Lasioglossum (Lasioglossum) sisymbrii* (Cockerell, 1895). County records: **Asotin**⁷, **Benton**^{1,2,7}, Chelan^{7,81}, Clark^{7,81}, **Columbia**⁷, Garfield^{7,81}, **Grant**^{1,2}, **Island**⁷, King^{1,2,81}, **Kittitas**², Klickitat^{1,2,81}, Okanogan^{1,2,3,59,81}, San Juan^{1,2,3,81,124}, Skagit^{1,2,3,81,124}, Spokane^{1,2,3,7,81}, Stevens⁸¹, Thurston^{81,119,133}, Walla Walla^{1,2,3,7,81}, Whitman^{1,2,3,6,7,81}, Yakima^{7,81}. Seasonality: Apr^{1,2,7}, May^{1,2,3,7,133}, Jun^{1,2,3,7,133}, Jul^{1,2,3,7}, Aug^{1,2,6,7}, Sep^{1,2,7}, Oct⁷ (2022^{1,2}). Collections: BBSL, BugGuide, iNaturalist, PWRC, TAMU, WSDA, WSUC. [= *Halictus sisymbrii* Cockerell, 1895]. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³, *Triteleia hyacinthina*¹³³; ASTERACEAE: *Balsamorhiza deltoidea*¹³³, *Crepis capillaris*¹³³, *Eriophyllum lanatum*¹³³, *Leucanthemum vulgare*¹³³, *Microseris laciniata*¹³³; BRASSICACEAE: *Sisymbrium altissimum*^{3,59}; CAMPANULACEAE: *Campanula rotundifolia*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³, *Symphoricarpos albus*¹³³; FABACEAE: *Lupinus albicaulis*¹³³; HYPERICACEAE: *Hypericum perforatum*¹³³; LAMIACEAE: *Prunella vulgaris*¹³³; ONAGRACEAE: *Chamerion angustifolium*¹³³; PLUMBAGINACEAE: *Armeria maritima*¹³³; ROSACEAE: *Potentilla gracilis*¹³³

362. *Lasioglossum (Lasioglossum) titusi* (Crawford, 1902). County records: **Benton**^{1,2}, Chelan⁷, Grays Harbor^{7,81}, Island^{7,81}, Klickitat^{1,2,81}, Pierce^{1,2,3,81}, **Spokane**^{1,2}, Thurston^{7,81,133}, Walla Walla^{1,2,3,81}, Whitman^{2,7,81}, **Yakima**⁷. Seasonality: Apr^{1,2,133}, May^{1,2,3,7,133}, Jun^{1,2,3,7,133}, Jul^{1,2,7,133}, Aug^{1,2}, Sep^{1,2}, Oct^{1,2} (2020¹³³). Collections: BBSL, SEMC, WSUC. Floral records: ASPARAGACEAE: *Camassia quamash*¹³³, *Triteleia hyacinthina*¹³³; ASTERACEAE: *Achillea millefolium*¹³³, *Balsamorhiza deltoidea*¹³³, *Crepis capillaris*¹³³, *Erigeron speciosus*¹³³, *Eriophyllum lanatum*¹³³, *Hypochaeris radicata*¹³³, *Leucanthemum vulgare*¹³³, *Microseris laciniata*¹³³, *Solidago simplex*¹³³, *Taraxacum officinale*¹³³; BRASSICACEAE: *Teesdalia nudicaulis*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³; CARYOPHYLLACEAE: *Cerastium arvense*¹³³; PLUMBAGINACEAE: *Armeria maritima*¹³³; RANUNCULACEAE: *Ranunculus occidentalis*¹³³

363. *Lasioglossum (Lasioglossum) trizonatum* (Cresson, 1874). County records: Adams⁸¹, **Benton**^{1,2,7}, **San Juan**^{1,2,3,124}, Stevens^{1,2}, Thurston¹¹⁹, Walla Walla⁷, **Whatcom**³, Whitman^{2,3,7,81}, Yakima^{7,81}. Seasonality: Apr^{1,2,7}, May^{1,2,7}, Jun^{1,2,7}, Jul⁷, Aug^{1,2,3,7} (2015^{1,2}). Collections: BBSL, JRYA, PWRC, WSUC. [= *Halictus trizonatus* Cresson, 1874]

364. * *Lasioglossum (Leuchalictus) leucozonium* (Schrank, 1781). County records: Thurston¹¹⁹. [= *Halictus similis* Smith, 1853].
365. * *Lasioglossum (Leuchalictus) zonulus* (Smith, 1848). County records: Clallam³, Jefferson^{1,2,3}, King^{3,81}, Kitsap^{7,134}, Klickitat^{1,2}, Pierce^{1,2,3,81}, San Juan^{1,2,3,6,124}, Skagit^{7,10,81}, Spokane^{1,2}, Thurston¹³³, Walla Walla^{1,2,7}, Whatcom^{6,81}. Seasonality: May^{1,2,6,133}, Jun^{1,2,7,133}, Jul^{1,2,6,7}, Aug^{1,2,3,6} (2020¹³³). Collections: BBSL, CUIC, JRYA, PWRC, WSDA, WSUC. Floral records: ASTEACEAE: *Gaillardia aristata*¹³³, *Microseris laciniata*¹³³; BRASSICACEAE: *Lepidium campestre*¹³³; LILIACEAE: *Fritillaria affinis*¹³³; ONAGRACEAE: *Epilobium cilatum*³; OROBANCHACEAE: *Parentucellia viscosa*¹³³; ROSACEAE: *Potentilla gracilis*¹³³
366. *Lasioglossum (Sphecodogastra) aberrans* (Crawford, 1903). County records: Adams⁵⁷, Spokane^{1,2}. Seasonality: Jun^{1,2} (2015^{1,2}). Collections: BBSL
367. † *Lasioglossum (Sphecodogastra) allonotus* (Cockerell, 1936). County records: Chelan⁷, Yakima⁷. Seasonality: Apr⁷, May⁷, Jun⁷, Sep⁷ (2008⁷). Collections: WSUC
368. *Lasioglossum (Sphecodogastra) comagenense* (Knerer and Atwood, 1964). County records: Pierce^{1,2,4,80}, Thurston^{1,2,4,80}, Yakima^{1,2}. Seasonality: Apr^{1,2,4}, Jun^{1,2,4}, Jul^{1,2} (2009^{1,2,4}). Collections: INHS, PCYU
369. *Lasioglossum (Sphecodogastra) cooleyi* (Crawford, 1906). County records: Jefferson^{1,2}, Klickitat^{1,2}, Okanogan^{1,2,3,59}, San Juan^{1,2,124}, Skagit³, Spokane^{1,2}, Stevens^{1,2}, Walla Walla^{1,2}, Whitman⁶¹. Seasonality: Apr^{1,2,61}, May^{1,2}, Jun^{1,2}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2} (2015^{1,2}). Collections: BBSL, PWRC, UCMS. Floral records: ROSACEAE: *Potentilla gracilis*³
370. † *Lasioglossum (Sphecodogastra) cordleyi* (Crawford, 1906). County records: Clark⁷. Seasonality: Jul⁷, Aug⁷ (1970⁷). Collections: WSUC
371. *Lasioglossum (Sphecodogastra) lusorium* (Cresson, 1872). County records: Benton^{57,80}, Grant⁷, Walla Walla^{1,2}, Yakima⁵⁷. Seasonality: May^{1,2}, Jun^{1,2,7}, Jul^{1,2}, Aug^{1,2} (2012^{1,2}). Collections: BBSL, WSUC. Comments: McGinley (2003) records this species on the Yakima River at Morgan's Ferry and places the location in Kittitas County; however, a review of historical maps indicates Morgan's Ferry is located in Yakima County.
372. † *Lasioglossum (Sphecodogastra) occultum* (Vachal, 1904). [= *Halictus occultus* Vachal, 1904]. County records: Skagit^{1,2}, Thurston^{1,2,4}. Seasonality: Jun^{1,2,4}, Aug^{1,2} (2011^{1,2}). Collections: PWRC
373. † *Lasioglossum (Sphecodogastra) orthocarpi* (Cockerell, 1936). County records: Island⁷, San Juan^{1,2,124}. Seasonality: May^{1,2}, Jul^{1,2}, Aug^{1,2,7} (2011^{1,2,124}). Collections: PWRC, WSUC

Genus *Sphecodes* Latreille

374. *Sphecodes arvensiformis* Cockerell, 1904. County records: Cowlitz^{1,2,3}, Thurston¹¹⁷, Walla Walla^{1,2,3}. Seasonality: Jun^{1,2,3,117}, Jul^{1,2,3} (1979^{1,2,3}). Collections: BBSL
375. ‡ *Sphecodes columbiae* Cockerell, 1906. County records: Grant^{1,2,3,121}. Seasonality: Jul^{1,2,3,121} (1902^{1,2,3,121}). Collections: NMNH. **Holotype.** USA, Washington,

Grant County, Grand Coulee; 12 July 1902; Type No. 29398, USNM ENT 00535232

376. ‡ *Sphecodes hesperellus* Cockerell, 1904. County records: Thurston¹¹⁷. Seasonality: Jun¹¹⁷ (1895¹¹⁷)
377. ‡ *Sphecodes kincaidii* Cockerell, 1898. County records: Thurston^{1,2,3,117}. Seasonality: Jun^{1,2,3,117} (1895^{1,2,3}). Collections: NMNH. **Holotype**. USA, Washington, Thurston County, Olympia; 19 June 1895; Type No. 18975, USNM ENT 00535248
378. ‡ *Sphecodes manni* Cockerell, 1913. County records: Whitman^{1,2,3,127}. Seasonality: Sep^{1,2,3,127} (1908^{1,2,3,127}). Collections: NMNH. **Holotype**. USA, Washington, Whitman County, Wawawai; 6 September 1908; WM Mann; Type No. 23322, USNM ENT 535259.
379. ‡ *Sphecodes minor* Robertson, 1898. County records: Thurston¹¹⁷. Seasonality: Jun¹¹⁷ (1896¹¹⁷)
380. ‡ *Sphecodes olympicus* Cockerell, 1904. County records: **Pacific**^{1,2}, Thurston¹¹⁷. Seasonality: May¹¹⁷, Aug^{1,2} (1952^{1,2}). Collections: EMEC. Comments: Discover Life has synonymized *S. olympicus* with *S. confertus* without reference or explanation. We are not aware of any published work that that synonymizes these species and retain them as separate taxa in this checklist.
381. ‡ *Sphecodes washingtoni* Cockerell, 1904. County records: Thurston¹¹⁷. Seasonality: Jun¹¹⁷ (1895¹¹⁷)

Nomiinae: Nomiini

Genus *Nomia* Latreille

382. *Nomia* (*Acunomia*) *melanderi* Cockerell, 1906. County records: **Benton**^{1,2}, Walla Walla^{1,2,3,78}, **Whitman**^{1,2,3}, Yakima¹²¹. Seasonality: Jun^{1,2}, Jul^{1,2,121}, Nov¹ (2022^{1,2}). Collections: AMNH, iNaturalist, NMNH, SEMC. Conservation status: G5 – Secure globally (NatureServe 2024)

Rophitinae

Genus *Dufourea* Lepeletier

383. †‡ *Dufourea calochorti* (Cockerell, 1924). County records: **Yakima**^{1,2,3}. Seasonality: Jul^{1,2,3} (1925^{1,2,3}). Collections: BBSL
384. *Dufourea campanulae* (Cockerell, 1897). County records: **Clallam**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2,3}, **Pierce**^{1,2,3}, Thurston^{1,2,118,133}. Seasonality: Jun^{1,2,118,133}, Jul^{1,2,3}, Aug^{1,2,3} (2018¹³³). Collections: BBSL, EMEC, JRYA, SEMC. [= *Halictoides campanulae* Cockerell, 1897]. Floral records: CAMPANULACEAE: *Campanula rotundifolia*¹³³, *C. scouleri*¹¹⁸
385. † *Dufourea holocyanea* (Cockerell, 1925). County records: **Asotin**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{2,3}, **Stevens**^{2,3}, **Yakima**^{1,2,3}. Seasonality: May^{1,2,3}, Jun^{2,3}, Jul^{1,2,3} (2000^{1,2,3}). Collections: BBSL, SEMC

386. *Dufourea maura* (Cresson, 1878). County records: **Clallam**³, Okanogan^{1,2,3,4,59}, **Spokane**^{1,2}. Seasonality: Jun^{1,2,3,4}, Jul^{1,2}, Aug³ (2015^{1,2}). Collections: BBSL, JRYA. Floral records: ASTERACEAE: *Achillea millefolium*^{3,59}
387. *Dufourea trochantera* Bohart, 1948. County records: Clallam^{1,2,3,82}, Okanogan^{1,2,3,59}, **Yakima**^{1,2,3}. Seasonality: May^{1,2}, Jul^{1,2,3}, Aug^{1,2,3,82} (2007^{1,2}). Collections: BBSL, SEMC. Floral records: HYDROPHYLLACEAE: *Phacelia*⁸², *P. leptosepala*^{3,59}

Megachilidae: Megachilinae: Anthidiini

Genus *Anthidiellum* Cockerell

388. † *Anthidiellum* (*Loyolanthidium*) *notatum* (Latreille, 1809). County records: **Lincoln**², **Spokane**². Seasonality: Jun², Aug² (2015²). Collections: BugGuide
389. † *Anthidiellum* (*Loyolanthidium*) *robertsoni* (Cockerell, 1904). County records: **Benton**^{1,2}, **Chelan**^{1,2,3}, **Klickitat**^{1,2,3}. Seasonality: Jul^{1,2,3}, Aug^{1,2} (2022^{1,2}). Collections: BBSL. [= *Anthidiellum notatum robertsoni* (Cockerell, 1904)]

Genus *Anthidium* Fabricius

390. † *Anthidium* (*Anthidium*) *atrifrons* Cresson, 1868. County records: **Asotin**³, **Columbia**¹³⁵, **Whitman**³, **Yakima**³. Seasonality: May³, Jun¹³⁵, Jul³ (2021¹³⁵). Collections: AMNH, BBSL, NMDG, SEMC. Conservation status: G5 – Secure Globally (NatureServe 2024)
391. †§ *Anthidium* (*Anthidium*) *banningense* Cockerell, 1904. County records: **Benton**⁷, **Garfield**¹³⁵. Seasonality: May^{7,135} (2023¹³⁵). Collections: NMDG, WSUC. Conservation status: G3 – Vulnerable globally (NatureServe 2024). Floral records: HYDROPHYLLACEAE: *Phacelia heterophylla*¹³⁵
392. † *Anthidium* (*Anthidium*) *clypeodentatum* Swenk, 1914. County records: **Benton**^{1,2}, **Spokane**^{1,2}. Seasonality: May^{1,2}, Jun^{1,2} (2015^{1,2}). Collections: BBSL. Conservation status: G4 – Apparently Secure Globally (NatureServe 2024)
393. § *Anthidium* (*Anthidium*) *edwardsii* Cresson, 1878. County records: Grant^{41,91}. Collections: NMNH. [= *Anthidium depressum* H. F. Schwarz, 1927]. **Holotype**. USA, Washington, Grant County, Coulee City; USNM 40164. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
394. *Anthidium* (*Anthidium*) *emarginatum* (Say, 1824). County records: **Adams**^{1,2,3}, **Benton**^{1,2}, **Jefferson**^{1,2}, **Lincoln**³, **Whitman**⁸. Seasonality: Apr^{1,2}, May^{1,2}, Jun^{1,2,3}, Aug^{1,2} (2015^{1,2}). Collections: BBSL, FMNH, UCRC, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: HYDROPHYLLACEAE: *Phacelia heterophylla*⁸
395. †‡ *Anthidium* (*Anthidium*) *formosum* Cresson, 1878. County records: **Spokane**^{1,3}. Seasonality: Jul^{1,3} (1882^{1,3}). Collections: INHS. Conservation status: G4 – Apparently Secure Globally (NatureServe 2024)
396. †* *Anthidium* (*Anthidium*) *manicatum* (Linnaeus, 1758). County records: **Benton**^{1,2}, **Chelan**^{1,2,3}, **Clallam**^{1,2,3}, **Clark**^{1,2,3}, **Douglas**^{1,2,3}, **Grant**^{1,2,3}, **Jefferson**^{1,2,3},

- King**^{1,2,3}, **Kittitas**^{1,2}, **Lewis**^{1,2,3}, **San Juan**^{1,2,5,6}, **Skamania**^{1,2}, **Snohomish**^{1,2,6}, **Spokane**^{1,2,3}, **Thurston**^{1,2,3,6}, **Walla Walla**^{1,2}, **Whatcom**^{1,2,3}, **Yakima**^{1,2,3}. Seasonality: May^{1,2}, Jun^{1,2,3}, Jul^{1,2,3,5,6}, Aug^{1,2,3,6}, Sep^{1,2,3} (2022^{1,2}). Collections: AMNH, BugGuide, iNaturalist, WSDA. Conservation status: G5 – Secure globally (NatureServe 2024)
397. *Anthidium (Anthidium) mormonum* Cresson, 1878. County records: **Kittitas**^{1,2,3}, **Klickitat**^{1,2}, **Okanogan**^{1,2,59}, **Spokane**^{1,2}. Seasonality: May^{1,2}, Jun^{1,2}, Jul^{1,2,3}, Aug^{1,2} (2015^{1,2}). Collections: BBSL, INHS, SEMC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Erigeron nivalis*⁵⁹; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹
398. *Anthidium (Anthidium) tenuiflorae* Cockerell, 1907. County records: **Kittitas**^{1,2,3}, **Okanogan**^{1,2,4,59}, **San Juan**^{1,2,3,5,6,124}, **Skagit**³. Seasonality: Jun⁵, Jul^{1,2,5,6}, Aug^{1,2,3,4} (2017⁶). Collections: BBSL, JRYA, PWRC, SEMC, WSDA. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: CRASSULACEAE: *Sedum lanceolatum*⁵⁹; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹; LAMIACEAE: *Micromeria douglasii*⁵; ROSACEAE: *Rubus ulmifolius*⁵
399. *Anthidium (Anthidium) utahense* Swenk, 1914. County records: **Grant**^{1,3}, **Klickitat**^{1,2}, **Spokane**^{1,2}, **Walla Walla**^{1,2,3}, **Whitman**^{8,41,91,98}, **Yakima**^{1,2,3}. Seasonality: Jun^{1,2}, Jul^{1,2,3}, Aug^{1,2} (2015^{1,2}). Collections: AMNH, BBSL, INHS, NMNH, SEMC, WSUC. [= *Anthidium sagittipictum* Swenk, 1914]. **Holotype**. USA, Washington, Whitman County, Pullman. Conservation status: G5 – Secure globally (NatureServe 2024). Floral Records: FABACEAE: *Vicia villosa*⁸
400. †* *Anthidium (Proanthidium) oblongatum* (Illiger, 1806). County records: **Clark**^{1,2}, **King**^{1,2,3}, **Pierce**^{1,2}, **Snohomish**^{1,2}, **Spokane**^{1,2}. Seasonality: May^{1,2}, Jun^{1,2}, Jul^{1,2,3}, Aug^{1,2}, Sep^{1,2} (2022^{1,2}). Collections: BugGuide, iNaturalist. Conservation status: G5 – Secure globally (NatureServe 2024)

Genus *Dianthidium* Cockerell

401. *Dianthidium (Dianthidium) curvatum* (Smith, 1854). County records: **Garfield**^{1,2,3}. Seasonality: Jul^{1,2} (1998^{1,2}). Collections: BBSL. Floral records: ASTERACEAE: *Carthamus tinctorius*³
- 401a. † *Dianthidium (Dianthidium) curvatum sayi* Cockerell, 1907. County records: **Benton**^{1,2,3}, **Garfield**^{1,2,3}, **Whitman**^{1,2,3}. Seasonality: Jul^{1,2,3}, Aug^{1,2}, Sep^{2,3} (2021^{1,2}). Collections: BBSL, iNaturalist, INHS
402. *Dianthidium (Dianthidium) heterulkei* Schwarz, 1940. County records: **Okanogan**^{1,2,3,59}. Seasonality: Aug^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL. Floral records: ASTERACEAE: *Erigeron speciosus*^{3,59}
403. *Dianthidium (Dianthidium) parvum* (Cresson, 1878). County records: **Thurston**¹³³. Seasonality: Jul¹³³ (2018¹³³). Floral records: ASTERACEAE: *Crepis capillaris*¹³³, *Erigeron speciosus*¹³³, *Hieracium scouleri*¹³³, *Solidago missouriensis*¹³³
404. † *Dianthidium (Dianthidium) plenum* Timberlake, 1943. County records: **Klickitat**^{1,2,3}. Seasonality: Jul^{1,2,3} (2010^{1,2,3}). Collections: BBSL

405. *Dianthidium (Dianthidium) pudicum* (Cresson, 1879). County records: Benton^{1,2,3,71}, Spokane⁷, Walla Walla^{1,2}. Seasonality: Apr^{1,2}, May^{1,2}, Jun^{1,2}, Jul^{1,2}, Aug^{1,2,3,7}, Sep^{1,2} (2023⁷). Collections: BBSL
406. *Dianthidium (Dianthidium) subparvum* Swenk, 1914. County records: Chelan^{1,2,3}, Okanogan^{1,2,3,59}, Spokane^{1,2}, Thurston¹³³, Walla Walla^{1,2,3,71}, Whitman⁹¹. Seasonality: Jul^{1,2,3,133}, Aug^{1,2,3}, Sep^{1,2,3} (2019¹³³). Collections: BBSL. **Holotype**. USA, Washington, Whitman County, Pullman. Floral records: ASTERACEAE: *Crepis capillaris*¹³³, *Erigeron speciosus*¹³³
407. *Dianthidium (Dianthidium) ulkei* (Cresson, 1878). County records: Klickitat^{1,2}, Okanogan^{1,2,3,59}, Pierce⁹¹, Spokane^{1,2}. Seasonality: Jul^{1,2}, Aug^{1,2,3}, Sep^{1,2} (2014^{1,2}). Collections: BBSL, CAS. [= *Dianthidium ulkei reductum* Timberlake, 1943]. **Holotype**. USA, Washington, Pierce County, Longmire, Mt. Rainier National Park.

Genus *Stelis* Panzer

408. † *Stelis (Dolichostelis) laticincta* Cresson, 1878. County records: Benton^{1,2}, Clark^{1,2}, Douglas^{1,2}, Klickitat^{1,2}. Seasonality: Jul^{1,2}, Aug^{1,2} (2022^{1,2}). Collections: BugGuide, iNaturalist
409. † *Stelis (Stelis) calliphorina* (Cockerell, 1911). County records: Spokane^{1,2}, Whitman^{2,3}. Seasonality: May^{2,3}, Jul^{1,2} (2014^{1,2}). Collections: BBSL
410. † *Stelis (Stelis) callura* Cockerell, 1925. County records: Adams^{1,2,3}, Benton^{1,2,3}, Spokane^{1,2}, Whitman^{2,3}. Seasonality: May^{1,2,3}, Jun^{2,3} (2016^{1,2}). Collections: BBSL
411. †† *Stelis (Stelis) foederalis* Smith, 1854. County records: Spokane^{1,2,3}. Seasonality: Jul^{1,2,3} (1963^{1,2,3}). Collections: BBSL
412. † *Stelis (Stelis) holocyanea* (Cockerell, 1925). County records: Spokane^{1,2}. Seasonality: May^{1,2}, Jul^{1,2,3} (2015^{1,2}). Collections: BBSL
413. † *Stelis (Stelis) lateralis* Cresson, 1864. County records: Spokane^{1,2}, Walla Walla^{1,2,3}. Seasonality: May^{1,2,3}, Jun^{1,2} (2015^{1,2}). Collections: BBSL
414. *Stelis (Stelis) montana* Cresson, 1864. County records: Benton^{1,2,3}, Chelan^{1,2,3}, Kittitas^{1,2,3}, Okanogan^{1,2,3,59}, Stevens³, Thurston^{1,2,3}, Walla Walla³, Yakima^{1,2,3}. Seasonality: May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL, SEMC. Floral records: ASTERACEAE: *Erigeron speciosus*^{3,59}; FABACEAE: *Lupinus sericeus*^{3,59}
415. † *Stelis (Stelis) monticola* Cresson, 1878. County records: King^{1,2,3}, San Juan^{1,2,3}, Spokane^{1,2}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jul³ (2015^{1,2}). Collections: AMNH, BBSL
416. †† *Stelis (Stelis) nitida* Cresson, 1878. County records: King^{1,2,3}. Seasonality: May^{1,2}, Jun^{1,2,3} (1928^{1,2,3}). Collections: BBSL. Floral records: ASTERACEAE: *Hypochaeris*³
417. †† *Stelis (Stelis) occidentalis* Parker and Griswold, 2013. County records: Spokane^{1,2,3}. Seasonality: Jun^{1,2,3} (1969^{1,2,3}). Collections: BBSL
418. † *Stelis (Stelis) pavonina* (Cockerell, 1908). County records: Lincoln^{2,3}, Spokane^{1,2}. Seasonality: May^{1,2,3}, Jun^{1,2}, Jul^{1,2} (2015^{1,2}). Collections: BBSL

419. ‡ *Stelis (Stelis) rubi* Cockerell, 1898. County records: King^{1,2,98}, Thurston⁹⁸. Seasonality: May^{1,2,98}, Jun⁹⁸ (1897^{1,2}). Collections: NMNH. **Holotype**. USA, Washington, King County, Seattle; 11 May 1897; 18979 USNM, USNM ENT 00537080. Floral records: ROSACEAE: *Rubus ursinus*⁹⁸. Comments: Discover Life has synonymized *S. rubi* with *S. monticola* without reference or explanation. We are not aware of any published work that that synonymizes these species and retain them as separate taxa in this checklist.
420. *Stelis (Stelis) subcaerulea* Cresson, 1878. County records: Okanogan^{1,2,3,59}, Whitman⁸. Seasonality: Aug^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL, WSUC. Floral records: ASTERACEAE: *Achillea millefolium*⁸, *Eriophyllum lanatum*⁸; CRASSULACEAE: *Sedum lanceolatum*^{3,59}
421. *Stelis (Stelis) submarginata* Cresson, 1878. County records: **Benton**^{1,2,3}, Okanogan^{1,2,3,59}, **Spokane**^{1,2}, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3}. Seasonality: May^{1,2,3}, Jun^{1,2,3}, Aug^{1,2,3} (2015^{1,2}). Collections: BBSL. Floral records: ASTERACEAE: *Anaphalis margaritacea*^{3,59}, *Erigeron corymbosus*^{3,59}
422. † *Stelis subglaucia* (Cockerell, 1925). County records: **Spokane**^{1,2}. Seasonality: Jul^{1,2} (2011^{1,2}). Collections: BBSL. Comments: Discover Life has synonymized *S. subglaucia* with *S. foederalis* without reference or explanation. We are not aware of any published work that that synonymizes these species and retain them as separate taxa in this checklist.

Dioxyini

Genus *Dioxys* Lepeletier and Serville

423. † *Dioxys aurifuscus* (Titus, 1901). County records: **Grant**¹. Seasonality: Jun¹ (2022¹). Collections: iNaturalist
424. † *Dioxys pacificus* Cockerell, 1916. County records: **Benton**^{1,2}. Seasonality: May^{1,2} (2014^{1,2}). Collections: BBSL
425. † *Dioxys pomonae* Cockerell, 1910. County records: **Pierce**³, **Spokane**^{1,2}. Seasonality: Jun^{1,2,3} (2014^{1,2}). Collections: BBSL
426. † *Dioxys productus* (Cresson, 1879). County records: **Spokane**^{1,2}. Seasonality: Jul^{1,2} (2015^{1,2}). Collections: BBSL

Megachilini

Genus *Coelioxys* Latreille

427. *Coelioxys (Boreocoelioxys) moestus* Cresson, 1864. County records: Okanogan^{1,2,59}, **Thurston**^{1,2}. Seasonality: Jun^{1,2}, Aug^{1,2} (2004^{1,2,59}). Collections: BBSL, UCMC. Floral records: ASTERACEAE: *Erigeron speciosus*⁵⁹
428. *Coelioxys (Boreocoelioxys) octodentatus* Say, 1824. County records: **Kittitas**^{1,2}, **Walla Walla**^{1,2,71}, **Yakima**^{1,2}. Seasonality: Jun^{1,2}, Jul^{1,2}, Sep^{1,2} (2012^{1,2}). Collections: AMNH, BBSL, MCZ, SEMC

429. *Coelioxys (Boreocoelioxys) rufitarsis* Smith, 1854. County records: Benton^{1,2,3,71}, Chelan³, Clallam³, Ferry^{1,2}, Franklin³, Jefferson^{1,2}, King^{1,2}, Kittitas^{2,3}, Lewis^{1,2,4}, Okanogan^{1,2}, San Juan^{1,2,3,5,22,124,136}, Thurston¹³³, Walla Walla^{1,2,3,71}, Whitman^{1,2,3}, Yakima^{1,2,3}. Seasonality: May^{1,2,3}, Jun^{1,2,3,133}, Jul^{1,2,3,5,133}, Aug^{1,2,3}, Sep^{1,2,3} (2021^{1,2}). Collections: AMNH, BBSL, CUIC, FMNH, iNaturalist, JRYA, PCYU, PWRC, RUAC, SEMC. Host records: *Megachile perihirta* Cockerell¹³⁴. Floral records: APOCYNACEAE: *Apocynum androsaemifolium*¹³³; ASTERACEAE: *Crepis capillaris*^{133,136}, *Hypochaeris radicata*⁵, *Leucanthemum vulgare*¹³³, *Microseris laciniata*¹³³; ONAGRACEAE: *Clarkia amoena*¹³³
430. *Coelioxys (Coelioxys) sodalis* Cresson, 1878. County records: Clallam³, Okanogan^{1,2,3,59}, Thurston^{52,133}. Seasonality: Jun^{52,133}, Aug^{1,2,3} (2018¹³³). Collections: AMNH, BBSL, JRYA. **Holotype**. USA, Washington, Thurston County, Olympia; 9–24 June 1895, 26 June 1896; T Kincaid. Floral records: ASTERACEAE: *Agoseris glauca* var. *dasycephala*^{3,59}, *Eriophyllum lanatum*¹³³, *Leucanthemum vulgare*¹³³
431. † *Coelioxys (Xerocoelioxys) edita* Cresson, 1872. County records: Asotin^{1,2,4}. Seasonality: May^{1,2,4} (2007^{1,2,4}). Collections: PCYU
432. *Coelioxys (Xerocoelioxys) grindeliae* Cockerell, 1900. County records: Benton^{1,2,3,71}. Seasonality: Aug^{1,2,3} (1997^{1,2,3}). Collections: BBSL
433. † *Coelioxys (Xerocoelioxys) mesae* Cockerell, 1921. County records: Grant^{1,2,4}. Collections: PCYU
434. *Coelioxys (Xerocoelioxys) serricaudatus* J. R. Baker, 1975. County records: Spokane⁷, Whitman^{58,90}. Seasonality: May⁷, Jun^{58,90} (2024⁷). **Paratype**. USA, Washington, Whitman County, Palouse; 26 June 1961; RW Dawson.

Genus *Megachile* Latreille

435. *Megachile (Argyropile) parallela* Smith, 1853. County records: Asotin^{1,2}, Benton^{1,2,3}, Walla Walla^{1,2,3,25}, Whitman^{2,3,8,25,71}, Yakima²⁵. Seasonality: Jun^{1,2,3,25}, Jul^{2,3}, Aug^{1,2,3}, Sep^{1,2,3} (2015^{1,2}). Collections: BBSL, iNaturalist, INHS, TAMU, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Helianthus annuus*⁸
436. *Megachile (Chelostomoides) angularum* Cockerell, 1902. County records: Benton^{1,2,3}, Chelan^{1,2}, King^{1,2}, Thurston⁶, Walla Walla^{1,2,3,26}, Whitman^{1,2}. Seasonality: Jun^{1,2,3,26}, Jul^{1,2}, Aug^{1,2,6} (2020^{1,2}). Collections: BBSL, iNaturalist, TAMU, WSDA. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Rhaponticum repens*³
437. * *Megachile (Eutricharaea) apicalis* Spinola, 1808. County records: Benton^{1,2,3}, Columbia^{1,2,4}, Kittitas^{1,2}, Spokane^{1,2,3}, Walla Walla^{1,2,3,71}, Whitman^{2,3}. Seasonality: Jun^{1,2,3}, Jul^{1,2}, Aug^{1,2,3}, Sep^{1,2} (2021^{1,2}). Collections: BBSL, iNaturalist, PCYU. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Rhaponticum repens*³
438. †*‡ *Megachile (Eutricharaea) concinna* Smith, 1879. County records: Yakima^{1,2,3}. Seasonality: Feb^{1,2,3} (1969^{1,2,3}). Collections: BBSL

439. * *Megachile (Eutricharaea) rotundata* (Fabricius, 1787). County records: Benton^{1,2,3,128}, Chelan^{1,2,3}, King^{1,2}, Spokane^{1,2,3}, Walla Walla^{1,2,3}, Yakima^{2,128}. Seasonality: Feb², Jun^{1,2,3}, Jul^{1,2,3} (2020^{1,2}). Collections: BBSL, BugGuide, iNaturalist, TAMU. Conservation status: G5 – Secure globally (NatureServe 2024)
440. *Megachile (Litomegachile) brevis* Say, 1837. County records: Benton⁷¹, Garfield⁴⁶, Skamania^{1,2}, Spokane^{1,2,3}, Thurston¹³³, Walla Walla⁷¹, Whitman⁸, Yakima^{1,2,27}. Seasonality: Jun^{1,2,46,133}, Jul^{1,2,3,133} (2020¹³³). Collections: BBSL, BugGuide, MSU, MCZ, UCRC, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: APOCYNACEAE: *Apocynum androsaemifolium*¹³³; ASTERACEAE: *Gaillardia aristata*¹³³, *Helianthus annuus*⁸, *Solidago missouriensis*¹³³; HYPERICACEAE: *Hypericum perforatum*¹³³; ONAGRACEAE: *Clarkia amoena*¹³³
441. *Megachile (Litomegachile) cleomis* Cockerell, 1900. County records: Grant⁷, Whitman⁷, Yakima⁷. Seasonality: May⁷, Jul⁷, Sep⁷ (1900⁷). Collections: WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Comments: Records from Grant and Yakima counties during May and September were males identified by Mitchell. *Megachile cleomis* was raised to full species from a subspecies of *M. texana* based on DNA barcodes with no morphological diagnosis (Sheffield and Genaro 2013). Mitchell (1935b) indicates that males of *M. cleomis* and *M. lippiae* are indistinguishable. As there is no way to confirm the identification of these males, it is possible they may represent records of *M. lippiae*.
- 441a. *Megachile (Litomegachile) cleomis* Cockerell, 1900/*lippiae* Cockerell, 1900. County records: Chelan^{1,2}, Garfield⁴⁶, Walla Walla^{1,2,3}, Whatcom^{1,2,3}, Whitman^{1,2,3}. Seasonality: May^{1,2}, Jun^{1,2}, Jul^{1,2,3} (1995^{1,2}). Collections: BBSL, SEMC, TAMU. Floral records: FABACEAE: *Lupinus sericeus*³. Comments: These records were originally identified as *M. texana*. Sheffield et al. (2011) and Sheffield and Genaro (2013) raised *M. lippiae* and *M. cleomis*, respectively, to full species from subspecies of *M. texana*, which has a distinctly eastern distribution compared to *M. cleomis*. While Sheffield and Genaro (2013) don't describe where the east/west dividing line is located, it is highly likely that Washington is far enough west for these records to not be *M. texana*. Since these specimens have not been physically examined, it is unclear whether these records are actually *M. lippiae* or *M. cleomis*.
442. *Megachile (Litomegachile) coquillettii* Cockerell, 1915. County records: Benton^{1,2,3}, Chelan^{1,2,3}, Walla Walla^{1,2,3}, Whitman²⁷, Yakima²⁷. Seasonality: Jul^{1,2,3} (1998^{1,2}). Collections: BBSL, SEMC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
443. *Megachile (Litomegachile) mendica* Cresson, 1878. County records: Kittitas^{1,3}, Whitman^{2,3}. Seasonality: Jun^{1,2,3} (2003^{2,3}). Collections: AMNH, BBSL. Conservation status: G5 – Secure globally (NatureServe 2024)
444. *Megachile (Litomegachile) onobrychidis* Cockerell, 1908. County records: Benton^{1,2,3}, Clark^{1,2}, Ferry^{1,2,3}, Garfield^{1,2,3,46}, Grant^{1,2,3}, Klickitat^{1,2}, Spokane^{1,2}, Walla Walla^{1,2,3}, Whitman^{1,3,6,27}, Yakima^{1,2,3}. Seasonality: May^{1,2}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3,6}, Sep^{1,2}, Oct^{1,2} (2014^{1,2}). Collections: AMNH, BBSL, SEMC, WSDA. [= *Megachile*

- brevis onobrychidis* Cockerell, 1908]. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Rhaponticum repens*³
445. § *Megachile* (*Litomegachile*) *snowi* Mitchell, 1927. County records: Whitman³². Seasonality: Jul³² (2013³²). Conservation status: G3 – Vulnerable globally (NatureServe 2024)
446. *Megachile* (*Megachile*) *centuncularis* (Linnaeus, 1758). County records: Okanogan^{1,2,3,59}, Pierce²⁴, Whitman²⁴. Seasonality: Jul²⁴, Aug^{1,2,3} (2012^{1,2}). Collections: BBSL. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Erigeron speciosus*^{3,59}
447. ‡ *Megachile* (*Megachile*) *lapponica* Thomson, 1872. County Records: Pend Oreille⁹⁴. Seasonality: Jul⁹⁴ (1931⁹⁴). [= *Megachile nivalis* Friese, 1903]. Conservation status: G5 – Secure globally (NatureServe 2024)
448. *Megachile* (*Megachile*) *montivaga* Cresson, 1878. County records: Benton^{1,2,3,71}, Grant^{1,2}, Kittitas^{1,2}, Klickitat^{1,2}, Okanogan^{1,2,3,59}, Pierce^{1,2,3,24}, Spokane^{1,2}, Thurston²⁴, Wahkiakum^{1,2}, Walla Walla^{1,2,3,71}, Whitman^{2,3,24}, Yakima²⁴. Seasonality: May^{1,2}, Jun^{1,2,3,24}, Jul^{1,2,3,24}, Aug^{1,2,3} (2020^{1,2}). Collections: BBSL, iNaturalist, INHS, SEMC, TAMU. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Cirsium vulgare*^{3,59}
449. *Megachile* (*Megachile*) *relativa* Cresson, 1878. County records: Chelan³, Clallam^{1,2,3}, Clark^{1,2,3}, Jefferson^{2,3}, King²⁴, Mason³, Okanogan^{1,2,3,59}, Pierce^{1,2,3,24}, Thurston²⁴, Whitman^{1,2,3,24}, Yakima^{1,2,3}. Seasonality: Jun^{1,2,3,24}, Jul^{1,2,3,24}, Aug^{1,2,3} (2014³). Collections: AMNH, BBSL, INHS, JRYA, SEMC, UCRC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Achillea millefolium*⁵⁹, *Erigeron speciosus*^{3,59}, *Taraxacum officinale*^{3,59}; BRASSICACEAE: *Smelowskia calycina*⁵⁹; ONAGRACEAE: *Chamerion angustifolium* ssp. *angustifolium*^{3,59}
450. § *Megachile* (*Megachiloides*) *anograe* Cockerell, 1908. County records: Asotin¹³¹, Benton^{1,2}, Grant^{1,2,4}. Seasonality: May^{1,2,131} (2015^{1,2}). Collections: BBSL, PCYU. [= *Megachile laurita* Mitchell, 1927]. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
451. *Megachile* (*Megachiloides*) *gravita* Mitchell, 1933. County records: Klickitat^{1,2}, Thurston⁹⁹. Seasonality: Jul^{1,2}, Aug⁹⁹ (2011^{1,2}). Collections: BBSL. [= *Megachile astata* Mitchell, 1933]. **Paratype**. USA, Washington, Thurston County, Olympia; 20 August 1893; T Kincaid. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
452. §‡ *Megachile* (*Megachiloides*) *legalis* Cresson, 1879. County records: Grant^{131,132}. Seasonality: Jun^{131,132} (1902^{131,132}). Collections: WSUC. [= *Megachile* (*Xeromegachile*) *couleeana* Mitchell, 1938]. **Holotype**. USA, Washington, Grant County, Grand Coulee, Wash Soap Lake; 29 June 1902; WSU No. 425. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
453. § *Megachile* (*Megachiloides*) *nevadensis* Cresson, 1879. County records: Benton^{1,2,3}, Yakima¹³¹. Seasonality: Aug^{1,2,3}, Sep^{1,2,3} (1995^{1,2,3}). Collections: BBSL. Conservation status: G3 – Vulnerable globally (NatureServe 2024). Floral records: ASTERACEAE: *Senecio*³

454. *Megachile (Megachiloides) pascoensis* Mitchell, 1934. County records: Franklin^{1,2,3,99}, **Spokane**^{1,2}, Thurston¹³³, Whitman⁹⁹. Seasonality: May^{1,2,3,99}, Jun¹³³, Jul^{99,133} (2020¹³³). Collections: BBSL, NMNH. **Holotype**. USA, Washington, Franklin County, Pasco; 25 May 1896; USNM No. 39982. **Paratype**. USA, Washington, Whitman County Pullman; July. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ONAGRACEAE: *Clarkia amoena*¹³³; POLEMONIACEAE: *Gilia capitata*¹³³
455. *Megachile (Megachiloides) subnigra* Cresson, 1879. County records: Adams^{30,131}, **Benton**^{1,2}, Grant^{1,2,4,131}, Whitman¹³¹, Yakima^{1,2,3,30,92}. Seasonality: May^{1,2,4,131}, Jun¹³¹, Jul^{1,2,3,92} (2015^{1,2}). Collections: BBSL, RSKM, SEMC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
456. § *Megachile (Megachiloides) umatillensis* (Mitchell, 1927). County records: Benton^{1,2,3,6,29,95}, Spokane^{29,95}, **Walla Walla**^{1,2}. Seasonality: May^{1,2,6}, Jun^{1,2,29,95}, Jul^{1,2,3,29,95}, Aug^{1,2} (2022⁶). Collections: BBSL, WSDA. **Paratype**. USA, Washington Territory, Little Spokane; 26 July 1882; S Henshaw. [= *Megachiloides umatillensis* Mitchell, 1927]. **Holotype**. USA, Washington Territory, Camp Umatilla; 26 June 1882; MCZ Type No 15714. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
457. ‡ *Megachile (Megachiloides) wheeleri* Mitchell, 1927. County records: Benton⁹⁵, Spokane^{1,2,93,95}, Yakima¹³¹. Seasonality: Jun⁹⁵, Jul^{1,2,131} (1936¹³¹). Collections: MCZ. [= *Megachile spokanensis* Mitchell, 1927]. **Holotype**. USA, Washington Territory, Little Spokane. **Paratype**. USA, Washington Territory, Camp Umatilla; 26 June 1882. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
458. *Megachile (Sayapis) fidelis* Cresson, 1878. County records: **Benton**^{1,2,3}, **Chelan**^{1,2,3}, **Ferry**^{1,2,3}, **King**^{1,2}, **Kitsap**^{1,2}, **Kittitas**^{1,2}, Okanogan^{1,2,3,59}, **Thurston**^{1,2,3}. Seasonality: Jun^{1,2,3}, Aug^{1,2,3}, Sep^{1,2} (2022^{1,2}). Collections: BBSL, iNaturalist, SEMC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: BRASSICACEAE: *Sisymbrium altissimum*^{3,59}
459. *Megachile (Sayapis) mellitarsis* Cresson, 1878. County records: **Grant**^{1,2}, Yakima²⁸. Seasonality: May^{1,2}, Jul²⁸ (2007^{1,2}). Collections: PCYU. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
460. *Megachile (Sayapis) pugnata* Say, 1837. County records: **Chelan**^{1,2,3}, **Ferry**², **King**³, **Kitsap**^{1,2,3}, Okanogan^{1,2,3,59}, San Juan^{3,28}, **Spokane**², **Thurston**², Walla Walla^{1,2,3,71}, Whitman^{2,8}, Yakima²⁸. Seasonality: Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3}, Sep^{1,2,3} (2021^{1,2}). Collections: AMNH, BBSL, BugGuide, iNaturalist, UCRC, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Achillea millefolium*³, *Erigeron speciosus*^{3,8}, *Taraxacum officinale*³
461. § *Megachile (Xanthosarus) dentitarsus* Sladen, 1919. County records: **San Juan**^{1,2,3,124}, Yakima^{1,2,29}. Seasonality: Jul^{1,2,29} (2011^{1,2,124}). Collections: MCZ, PWRC. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
462. † *Megachile (Xanthosarus) frigida* Smith, 1853. County records: **Grays Harbor**^{1,2,3}, **King**³, **Lewis**^{2,3}, Okanogan^{1,2,3}, **Thurston**^{2,3}, **Walla Walla**^{1,2,3}, **Yakima**^{1,2,3}.

- Seasonality: Jun^{1,2,3}, Jul^{1,2,3}, Aug³ (2017²). Collections: BBSL, BugGuide, SEMC, UCRC. Conservation status: G5 – Secure globally (NatureServe 2024)
- 463. *Megachile (Xanthosarus) gemula* Cresson, 1878.** County records: Okanogan^{1,2,3,59}, **San Juan**², Thurston^{3,24,133}. Seasonality: May¹³³, Jun^{1,2,3,24,133}, Jul^{1,2,3,24} (2020¹³³). Collections: BBSL, SEMC, UCRC, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASPARAGACEAE: *Triteleia hyacinthina*¹³³; CAMPANULACEAE: *Campanula rotundifolia*^{3,59}; CAPRIFOLIACEAE: *Plectritis congesta*¹³³; FABACEAE: *Lupinus*^{3,59}; HYDROPHYLACEAE: *Phacelia leptosepala*^{3,59}; ROSACEAE: *Physocarpus malvaceus*⁸
- 463a. *Megachile (Xanthosarus) gemula cressonii* Dalla Torre, 1896.** County records: Thurston²⁴. Seasonality: Jul²⁴ (1896²⁴)
- 463b. *Megachile (Xanthosarus) gemula gemula* Cresson, 1878.** County records: Garfield⁴⁶. Seasonality: (1989⁴⁶)
- 464. *Megachile (Xanthosarus) melanophaea* Smith, 1853.** County records: **Chelan**³, **Clallam**^{1,2,3}, **Jefferson**^{1,2,3}, **King**^{1,2,3}, Okanogan^{1,2,3,59}, Pierce^{1,2,3,24}, San Juan^{1,2,3,5,24,124,136}, **Skamania**^{1,2,3}, Thurston^{2,24,133}, **Wahkiakum**^{1,2}, **Yakima**^{1,2,3}. Seasonality: May^{1,2,133}, Jun^{1,2,3,5,24,133}, Jul^{1,2,3,5,24,32}, Aug^{1,2,3,24} (2021^{1,2}). Collections: AMNH, BBSL, BugGuide, iNaturalist, JRYA, PWRC, SEMC, UCRC. [= *Megachile gemula fulvogemula* Mitchell, 1935]. **Paratype.** USA, Washington, Thurston County, Olympia; 2 June 1894. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: APOCYNACEAE: *Apocynum androsaemifolium*¹³³; ASTERACEAE: *Eriophyllum lanatum*¹³³, *Hypochaeris radicata*¹³³, *Microseris laciniata*¹³³; CAMPANULACEAE: *Campanula rotundifolia*^{3,59,133}; CAPRIFOLIACEAE: *Plectritis congesta*¹³³; CONVULVACEAE: *Calystegia soldanella*¹³⁶; FABACEAE: *Lupinus albicaulis*¹³³, *L. littoralis*¹³⁶, *Trifolium repens*^{3,59}, *Vicia sativa*^{5,133}; LAMIACEAE: *Micromeria douglasii*⁵; ONAGRACEAE: *Chamerion angustifolium*¹³³; PLANTAGINACEAE: *Penstemon washingtonensis*⁵⁹; PLUMBAGINACEAE: *Armeria maritima*¹³³; ROSACEAE: *Potentilla gracilis*¹³³, *Rubus ulmifolius*⁵
- 464a. *Megachile (Xanthosarus) melanophaea calogaster* Cockerell, 1898.** County records: King²⁴, Thurston²⁴. Seasonality: Jun²⁴ (1895²⁴). Collections: NMNH, WSUC. **Holotype.** USA, Washington, Thurston County, Olympia; 21 June 1895; USNM No. 4268
- 465. *Megachile (Xanthosarus) perihirta* Cockerell, 1898.** County records: **Benton**^{1,2,3}, **Chelan**^{1,2,3}, **Clallam**^{1,2,3}, **Douglas**^{1,2}, **Ferry**^{1,2,3}, Garfield⁴⁶, Grant^{1,2,3,29}, **Island**^{1,2}, **Jefferson**^{1,2,3}, **King**^{1,2,3,29}, **Kitsap**^{1,2,3,134}, **Kittitas**^{1,2,3,29}, **Klickitat**^{1,2}, Okanogan^{1,2,3,59}, **Pierce**^{1,2,3}, San Juan^{1,2,3,5,6,29,124,136}, **Skamania**^{1,2}, **Snohomish**^{1,2,3}, **Spokane**^{1,2}, **Stevens**³, Thurston^{1,2,3,29,133}, **Wahkiakum**^{1,2}, Walla Walla^{1,2,3,71}, **Whatcom**^{1,2,3,6}, **Whitman**^{1,2,3,8,29}, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, May^{1,2}, Jun^{1,2,3,133}, Jul^{1,2,3,5,133}, Aug^{1,2,3,6}, Sep^{1,2,3,29}, Oct^{1,2} (2021^{1,2}). Collections: AMNH, BBSL, BugGuide, FMNH, iNaturalist, INHS, JRYA, PWRC, SEMC, TAMU, UCRC, WSDA, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: APOCYNACEAE: *Apocynum androsaemifolium*¹³³; ASTERACEAE: *Achillea*

*millefolium*⁵⁹, *Cirsium arvense*^{8,133}, *C. vulgare*⁸, *Crepis capillaris*^{133,136}, *Erigeron speciosus*^{3,59,133}, *Gaillardia aristata*^{8,133}, *Grindelia integrifolia*⁵, *Helianthus*³, *Hieracium scouleri*¹³³, *Hypochaeris radicata*¹³³, *Leucanthemum vulgare*¹³³, *Senecio jacobaea*¹³³, *S. serra*⁸, *S. triangularis*⁵⁹, *Solidago*⁸, *S. canadensis*¹³³, *S. missouriensis*¹³³, *Taraxacum officinale*⁵⁹, *Xanthium*⁸; BRASSICACEAE: *Cakile maritima*¹³⁶; CONVULVACEAE: *Calystegia soldanella*¹³⁶; FABACEAE: *Lupinus*⁵⁹, *L. sericeus*³, *Vicia villosa*⁸; HYPERICACEAE: *Hypericum perforatum*¹³³; ONAGRACEAE: *Chamerion angustifolium*¹³³, *Clarkia amoena*¹³³; ROSACEAE: *Rubus ulmifolius*⁵

Osmiini

Genus *Ashmeadiella* Cockerell

466. ‡ *Ashmeadiella (Arogochila) foxiella* Michener, 1939. County records: Yakima⁴⁴. Seasonality: May⁴⁴ (1903⁴⁴)
467. *Ashmeadiella (Arogochila) timberlakei timberlakei* Michener, 1936. Comments: Michener (1939) notes an observation of a single specimen from Washington but does not provide a locality within the state.
468. *Ashmeadiella (Ashmeadiella) aridula* Cockerell, 1910. County records: Spokane^{1,2}, Whitman⁴⁴, Yakima^{2,3}. Seasonality: Jul^{1,2,3,44} (2015^{1,2}). Collections: BBSL, SEMC
469. ‡ *Ashmeadiella (Ashmeadiella) buconis denticulata* (Cresson, 1878). County records: Chelan⁴⁴, Yakima⁴⁴. Seasonality: Jul⁴⁴ (1918⁴⁴)
470. *Ashmeadiella (Ashmeadiella) cactorum* (Cockerell, 1897). County records: King⁴⁴, Okanogan^{1,2,3,59}, Thurston⁹⁷. Seasonality: Jul^{44,97}, Aug^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL. [= *Ashmeadiella curriei curriei* Titus, 1904]. Floral records: ASTERACEAE: *Taraxacum officinale*^{3,59}; HYDROPHYLLACEAE: *Phacelia leptosepala*^{3,59}
471. ‡ *Ashmeadiella (Ashmeadiella) californica californica* (Ashmead, 1897). County records: Grant⁴⁴, Whitman^{1,2,3,44}. Seasonality: Jul^{1,2,3,44} (1925^{1,2,3,44}). Collections: SEMC
472. *Ashmeadiella (Ashmeadiella) cubiceps* (Cresson, 1879). County records: Okanogan^{1,2,3,59}. Seasonality: Aug^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL. Floral records: ASTERACEAE: *Erigeron speciosus*^{3,59}, *Hieracium scouleri*^{3,59}
473. † *Ashmeadiella (Ashmeadiella) meliloti* (Cockerell, 1897). County records: Spokane^{1,2}. Seasonality: Jul^{1,2} (2015^{1,2}). Collections: BBSL

Genus *Atoposmia* Cockerell

474. *Atoposmia (Atoposmia) elongata* (Michener, 1936). County records: Okanogan^{1,2,3,4,59}, Pierce⁹⁶. Seasonality: Jul^{1,2,3,4} (2004^{1,2,3,4,59}). Collections: BBSL
475. *Atoposmia (Hexosmia) copelandica* (Cockerell, 1908). County records: Okanogan^{1,2,3,59}, Stevens^{1,2}. Seasonality: Jul^{1,2}, Aug^{1,2,3} (2014^{1,2}). Collections: BBSL. Floral records: HYDROPHYLLACEAE: *Phacelia leptosepala*^{3,59}

Genus *Chelostoma* Latreille

476. *Chelostoma* (*Neochelostoma*) *minutum* Crawford, 1916. County records: Okanogan^{1,2,3,59}, Spokane^{43,96}. Seasonality: Jun^{1,2,3}, Jul⁴³, Aug^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL. Floral records: CRASSULACEAE: *Sedum lanceolatum*^{3,59}
477. *Chelostoma* (*Neochelostoma*) *phaceliae* Michener, 1938. County records: Asotin⁹⁶, Benton^{1,2,3}, Walla Walla^{43,96}. Seasonality: May⁴³, Jun^{1,2,3} (1994^{1,2,3}). Collections: BBSL

Genus *Heriades* Spinola

478. † *Heriades* (*Neotrypetes*) *carinata* Cresson, 1864. County records: Cowlitz^{1,2}, King^{1,2,3}, Thurston³, Yakima^{1,2}. Seasonality: Jul^{1,2}, Aug^{1,2,3} (1983^{1,2,3}). Collections: BBSL, SEMC, UCRC
479. *Heriades* (*Neotrypetes*) *cressoni* Michener, 1938. County records: Chelan^{1,2,3}, Okanogan^{1,2,3,59}. Seasonality: Jul^{1,2,3}, Aug^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL. Floral records: ASTERACEAE: *Erigeron speciosus*^{3,59}; MALVACEAE: *Iliamna longisepala*³
480. †‡ *Heriades* (*Neotrypetes*) *occidentalis* Michener, 1938. County records: Yakima³. Seasonality: Jul³ (1920³). Collections: UCRC
481. *Heriades* (*Neotrypetes*) *variolosa* (Cresson, 1872). County records: Stevens^{1,2}, Yakima^{1,2,3,42}. Seasonality: Jul^{1,2,3}, Aug^{1,2,3} (2011^{1,2}). Collections: BBSL, SEMC

Genus *Hoplitis* Klug

482. *Hoplitis* (*Alcidamea*) *albifrons* (Kirby, 1837). County records: Chelan³, Clallam^{1,2,3}, Columbia^{1,2,3}, Kittitas^{1,2}, Klickitat^{1,2,3}, Okanogan^{1,2,3,4,59}, Pierce^{1,2,3}, San Juan³, Spokane^{1,2}, Stevens^{1,2}, Thurston^{2,133}, Yakima^{1,2,3,96}. Seasonality: Apr², Jun^{1,2,3,4,133}, Jul^{1,2,3,4}, Aug^{1,2,4} (2018^{2,133}). Collections: AMNH, BBSL, BugGuide, SEMC, UCRC, WSUC. Floral records: ASTERACEAE: *Arnica sororia*⁵⁹, *Erigeron speciosus*⁵⁹, *Senecio triangularis*⁵⁹, *Taraxacum officinale*^{3,59}; FABACEAE: *Lupinus*^{3,59}, *L. polyphyllus*⁸, *Trifolium pratense*⁵⁹, *T. repens*^{3,59}; HYDROPHYLACEAE: *Phacelia leptosepala*^{8,59}; MALVACEAE: *Sidalcea oregana*³; PLANTAGINACEAE: *Penstemon confertus*⁵⁹; ROSACEAE: *Potentilla gracilis*^{3,59,133}, *Rosa nutkana* ssp. *nutkana*⁵⁹
483. *Hoplitis* (*Alcidamea*) *fulgida* (Cresson, 1864). County records: Clallam³, Columbia¹³⁵, Ferry², Grant¹⁰⁴, Kittitas^{1,2,3}, Okanogan^{1,2,3,59}, Pierce³, Spokane^{1,2,3}, Stevens^{1,2}, Yakima^{1,2,3}. Seasonality: May^{1,2,104}, Jun^{1,2,3,135}, Jul^{1,2,3}, Aug^{1,2,3} (2021¹³⁵). Collections: BBSL, BugGuide, NMDG, INHS, JRYA, SEMC, UCRC, WSUC. Floral records: ASTERACEAE: *Achillea millefolium*^{3,59}, *Crepis atrabarba*⁵⁹, *Taraxacum officinale*^{3,59}; BORANGINACEAE: *Myosotis laxa*^{3,59}; HYDROPHYLACEAE: *Phacelia leptosepala*^{3,59}, *P. heterophylla*⁸; POLEMONIACEAE: *Polemonium pulcherrimum*⁵⁹; RANUNCULACEAE: *Delphinium nuttallianum*⁸, *Ranunculus*⁸; ROSACEAE: *Physocarpus malvaceus*⁸, *Potentilla gracilis*^{3,59}

484. *Hoplitis (Alcidamea) grinnelli* (Cockerell, 1910). County records: **Benton**^{1,2,3}, Garfield^{1,2,3,46,104}, **Grant**^{1,2,4}, **Klickitat**^{1,2}, Lewis^{1,2,4,104}, Okanogan^{1,2,3,59}, **Spokane**^{1,2}, Thurston¹³³, Whitman^{1,2,3,103}. Seasonality: Apr^{1,2}, May^{1,2,3,4,104}, Jun^{1,2,103,133}, Jul¹⁰³, Aug^{1,2,3} (2018¹³³). Collections: BBSL, PCYU, SEMC. Floral records: FABACEAE: *Astragalus*³, *Lupinus lepidus*¹³³; ROSACEAE: *Potentilla gracilis*¹³³
485. *Hoplitis (Alcidamea) hypocrita* (Cockerell, 1906). County records: **Benton**^{1,2,3}, Garfield^{1,2,3,46}, **Spokane**^{1,2,3}, Whitman^{1,2,3,8}, **Yakima**^{1,2,4}. Seasonality: May^{1,2,3,4}, Jun^{1,2,3,46}, Jul^{1,2,3} (2012^{1,2}). Collections: BBSL, WSUC. Floral records: APIACEAE: *Lomatium*⁸; ASTERACEAE: *Balsamorhiza sagitta*⁸; FABACEAE: *Astragalus*³, *A. bungeanus*³, *A. falcatus*³; PLANTAGINACEAE: *Penstemon attenuatus*⁸
486. *Hoplitis (Alcidamea) louisae* (Cockerell, 1934). County records: **Benton**^{1,2,3}, **Kittitas**^{1,2,3}, Thurston¹⁰³, Yakima¹⁰³. Seasonality: Jun^{1,2,3}, Jul^{1,2,3} (1994^{1,2,3}). Collections: BBSL, SEMC
487. *Hoplitis (Alcidamea) producta* (Cresson, 1864). County records: **Benton**^{1,2}, Klickitat^{1,2,104}, Okanogan⁵⁹, **Skamania**^{1,2}, **Spokane**^{1,2}, Thurston¹³³, **Wahkiakum**^{1,2}, Whitman^{6,104}. Seasonality: Apr^{1,2}, May¹⁰⁴, Jun^{1,2,133}, Jul^{1,2,6,104}, Aug^{1,2} (2019¹³³). Collections: BBSL. Floral records: ASTERACEAE: *Achillea millefolium*⁵⁹; FABACEAE: *Lupinus lepidus*¹³³; ROSACEAE: *Potentilla gracilis*¹³³
- 487a. § *Hoplitis (Alcidamea) producta subgracilis* Michener, 1947. County records: **Okanogan**^{1,2,3}, Pierce¹⁰³, **Skagit**^{1,2,3}, Whitman¹⁰³. Seasonality: Jun^{1,2,3}, Jul^{1,2,3} (2004^{1,2,3}). Collections: BBSL. Conservation status: Vulnerable (National Research Council 2005, Shepherd 2005d). Floral records: ASTERACEAE: *Achillea millefolium*³
488. *Hoplitis (Alcidamea) sambuci* Titus, 1904. County records: Garfield^{1,2,3,46}, **Klickitat**^{1,2}, **Spokane**^{1,2}, **Walla Walla**^{1,2,3}, Whitman^{1,2,3,96,103}. Seasonality: May^{1,2,3}, Jun^{1,2,3,46}, Jul^{1,2}, Aug^{1,2} (2015^{1,2}). Collections: BBSL, NMNH. **Holotype**. USA, Washington, Whitman County, Pullman; CV Piper; Type No. 66860, USNM ENT 00536520. Floral records: *Sambucus glauca*⁹⁶
489. †† *Hoplitis (Alcidamea) spoliata* (Provancher, 1888). County records: **Whitman**^{1,3}. Seasonality: Jul^{1,3} (1908^{1,3}). Collections: INHS
490. † *Hoplitis (Alcidamea) uvulalis* (Cockerell, 1902). County records: **Okanogan**^{1,2}. Seasonality: Aug^{1,2} (2012^{1,2}). Collections: BBSL
491. *Hoplitis (Alcidamea) viridimicans* (Cockerell, 1897). County records: Thurston^{96,103}. Collections: NMNH. **Holotype**. USA, Washington, Thurston County, Olympia
492. *Hoplitis (Formicapis) robusta* (Nylander, 1848). County records: **Chelan**^{1,2,3}, **Garfield**^{1,2,3}, Okanogan^{1,2,3,59}. Seasonality: Jul^{1,2,3}, Aug^{1,2,3} (2010^{1,2,3}). Collections: BBSL
493. § *Hoplitis (Proteriades) orthognatha* (Griswold, 1983). County records: Asotin^{102,112}. Seasonality: Jun¹⁰² (1973¹⁰²). Collections: WSUC. [= *Proteriades orthognathus* Griswold, 1983]. **Holotype**. USA, Washington, Asotin County, Fields Spring, 6.4 km S Anatone; 7 June 1973; M Jackson; WSUC No. 370. Conservation status: Vulnerable (Shepherd 2005e; National Research Council 2007)

Genus *Osmia* Panzer

494. *Osmia* (*Cephalosmia*) *californica* Cresson, 1864. County records: **Benton**^{1,2,3}, **Chelan**¹³⁶, **Franklin**^{121,129}, **Grant**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2}, **Lincoln**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3,8}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2,3}, May^{1,2,3,129}, Jun^{1,2,3}, Jul^{1,2,3} (2015^{1,2}). Collections: AMNH, BBSL, INHS, SEMC, WSUC. [= *Osmia pascoensis* Cockerell, 1897]. **Paratype**. USA, Washington, Franklin County, Pasco; May; Kincaid; Type No. 6868. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: APIACEAE: *Lomatium*⁸; ASTERACEAE: *Arnica sororia*^{3,59}, *Balsamorhiza sagittata*⁸, *Gaillardia aristata*⁸, *Senecio hydrophiloides*^{3,59}; FABACEAE: *Lupinus sericeus*⁵⁹; GROSSULARIACEAE: *Ribes aureum*⁸
495. † *Osmia* (*Cephalosmia*) *grinnelli* Cockerell, 1910. County records: **Yakima**⁷. Seasonality: May⁷, Aug⁷ (2012⁷). Collections: WSUC
496. *Osmia* (*Cephalosmia*) *marginipennis* Cresson, 1878. County records: **Chelan**³, **Okanogan**^{1,2,3,59}, **Stevens**^{1,2}, **Whitman**⁹⁷, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jul^{1,2,3} (2012^{1,2}). Collections: BBSL, UCRC. Floral records: ROSACEAE: *Potentilla gracilis*^{3,59}
497. *Osmia* (*Cephalosmia*) *montana* Cresson, 1864. County records: **Douglas**⁷, **Kittitas**^{1,2,3}, **Klickitat**^{1,2}, **Okanogan**^{1,2,3,4,59}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Whitman**⁸, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2}, Jun^{1,2,3}, Jul^{1,2,3,7}, Aug^{1,2} (2016^{1,2}). Collections: BBSL, BugGuide, EMEC, SEMC, WSUC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Arnica sororia*⁵⁹, *Crepis atrabarba*⁵⁹, *Erigeron speciosus*^{3,59}, *Gaillardia aristata*⁸, *Senecio hydrophiloides*⁵⁹, *S. triangularis*⁵⁹, *Taraxacum officinale*^{3,59}; POLEMONIACEAE: *Polemonium pulcherrimum*^{3,59}; ROSACEAE: *Potentilla gracilis*^{3,59}, *Rosa*⁸
498. *Osmia* (*Cephalosmia*) *subaustralis* Cockerell, 1900. County records: **Clallam**³, **Okanogan**^{1,2,3,4,59}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Walla Walla**^{1,2,3}, **Whitman**⁸. Seasonality: Apr^{1,2}, Jun^{1,2,3}, Jul^{1,2,3,4}, Aug^{1,2,3,4} (2014^{1,2,3}). Collections: BBSL, JRYA, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Arnica cordifolia*⁵⁹, *Erigeron speciosus*^{3,59}, *Gaillardia aristata*⁸, *Packera cana*³, *Senecio*⁵⁹, *S. triangularis*⁵⁹, *Taraxacum officinale*⁵⁹; ROSACEAE: *Fragaria virginiana* ssp. *platypetala*⁵⁹
499. †§ *Osmia* (*Hapsidosmia*) *iridis* Cockerell and Titus, 1902. County records: **Garfield**⁷, **Spokane**^{1,2}. Seasonality: May^{1,2}, Jul⁷ (2014^{1,2}). Collections: BBSL, WSUC. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
500. †* *Osmia* (*Helicosmia*) *caerulescens* (Linnaeus, 1758). County records: **Clallam**², **King**^{1,2,3}, **Skamania**^{1,2}, **Spokane**², **Thurston**^{1,2,3}, **Wahkiakum**^{1,2}, **Yakima**². Seasonality: May^{1,2,3}, Jun^{1,2}, Jul^{1,2} (2019^{1,2}). Collections: BBSL, BugGuide, iNaturalist. [= *Osmia coerulescens* (Linnaeus, 1758)]. Conservation status: G5 – Secure globally (NatureServe 2024)
501. *Osmia* (*Helicosmia*) *coloradensis* Cresson, 1878. County records: **Chelan**^{1,2,3}, **Clallam**³, **Island**^{1,2,3}, **King**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2,3}, **Lewis**^{1,2,4},

- Okanogan^{1,2,3,4,59}, **Pierce**^{1,2,3}, **Spokane**^{1,2,3}, **Stevens**^{1,2}, **Thurston**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whatcom**^{1,2,3}, **Whitman**^{1,2,3}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2,3,4}, Jun^{1,2,3}, Jul^{1,2,3,4}, Aug^{1,2,3,4} (2016^{1,2}). Collections: BBSL, JRYA, PCYU, SEMC, WSUC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Achillea millefolium*^{3,59}, *Agoseris glauca* var. *dasycephala*⁵⁹, *Arnica cordifolia*⁸, *A. sororia*⁵⁹, *Cirsium vulgare*⁵⁹, *Erigeron speciosus*^{3,59}, *Senecio*³, *S. hydrophiloides*⁵⁹, *S. triangularis*⁵⁹, *Taraxacum officinale*^{3,59}; FABACEAE: *Trifolium repens*⁸; POLEMONIACEAE: *Polemonium pulcherrimum*⁵⁹
502. † *Osmia (Helicosmia) texana* Cresson, 1872. County records: **Asotin**^{2,3}, **Clark**^{1,2}, **Klickitat**^{1,2}, **Pierce**^{1,2,3,4}, **Wahkiakum**^{1,2}, **Whitman**^{1,4}, **Yakima**⁷. Seasonality: May^{1,4}, Jun^{1,3,4}, Jul¹, Aug⁷ (2016¹). Collections: BBSL, PCYU, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024)
503. *Osmia (Melanosmia) aglaia* Sandhouse, 1939. County records: **Whitman**³². Seasonality: May³² (2012³²). Conservation status: G5 – Secure globally (NatureServe 2024)
504. *Osmia (Melanosmia) albolateralis* Cockerell, 1906. County records: **Benton**^{1,2,3}, **Chelan**¹³⁶, **Garfield**^{1,2,3,46}, **Kittitas**^{2,3}, **Klickitat**^{1,2}, **Lincoln**^{2,3}, **Okanogan**^{1,2,3,4,59}, **Skagit**⁷, **Skamania**^{1,2}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Wahkiakum**^{1,2}, **Whitman**^{1,2,3,6}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3,6,7}, Jul^{1,2,3,7}, Aug^{1,2,3,4} (2016^{1,2}). Collections: BBSL, SEMC, WSDA, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Taraxacum officinale*^{3,59}; BORAGINACEAE: *Myosotis laxa*⁵⁹; FABACEAE: *Astragalus miser* var. *miser*^{3,59}; LAMIACEAE: *Salvia dorrii*³, PLANTAGINACEAE: *Penstemon confertus*^{3,59}; POLEMONIACEAE: *Polemonium pulcherrimum*⁵⁹
505. † *Osmia (Melanosmia) atriventris* Cresson, 1864. County records: **Whitman**^{2,3}. Seasonality: (2003^{2,3}). Collections: BBSL. Conservation status: G5 – Secure globally (NatureServe 2024)
506. *Osmia (Melanosmia) atrocyanea* Cockerell, 1897. County records: **Chelan**^{1,2,3}, **Clark**^{1,2}, **Garfield**^{1,2,3,46}, **Klickitat**^{1,2,3}, **Lincoln**^{2,3}, **Okanogan**^{1,2,3,59}, **Spokane**^{1,2,3}, **Stevens**^{1,2}, **Thurston**^{1,2,129}, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2}, Jun^{1,2,3}, Jul^{1,2,3,129} (2015^{1,2}). Collections: BBSL, NMNH, SEMC, WSUC. **Holotype**. USA, Washington, Thurston County, Olympia; 4 July 1896; Type No. 28209, USNM ENT 00536700. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Balsamorhiza sagittata*⁸; FABACEAE: *Astragalus bungeanus*³, *Lupinus polyphyllus*⁸, *Trifolium repens*^{3,59}, *Vicia villosa*⁸; PLANTAGINACEAE: *Penstemon confertus*^{3,59}; ROSACEAE: *Malus domestica*⁸
507. †§ *Osmia (Melanosmia) austromaritima* Michener, 1936. County records: **Benton**^{1,2}, **Spokane**^{1,2}. Seasonality: Apr^{1,2}, May^{1,2}, Jun^{1,2} (2014^{1,2}). Collections: BBSL. [= *Osmia hurdi* White, 1952]. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
508. † *Osmia (Melanosmia) bella* Cresson, 1878. County records: **Grant**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2,3}, **Okanogan**^{1,2,3}, **Pierce**^{1,2,3}, **San Juan**^{1,2,3}. Seasonality: Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3} (2004^{1,2,3}). Collections: BBSL

509. *Osmia (Melanosmia) brevis* Cresson, 1864. County records: **Kittitas**^{2,3}, **Klickitat**^{1,2,3}, **Okanogan**^{1,2,3,4,59}, **Spokane**^{1,2,3}, **Stevens**^{1,2}, **Whitman**^{1,2,3,4,8}, **Yakima**^{1,2,3}. Seasonality: May^{1,2,3,4}, Jun^{1,2,3}, Jul^{1,2,3,4}, Aug^{1,2,3,4} (2015^{1,2}). Collections: BBSL, INHS, PCYU WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Agoseris glauca* var. *dasycephala*^{3,59}, *Erigeron speciosus*⁵⁹; FABACEAE: *Trifolium repens*⁸, *Vicia villosa*⁸; HYDROPHYLACEAE: *Phacelia heterophylla*⁸; PLANTAGINACEAE: *Penstemon confertus*^{3,59}, *P. serrulatus*³, *P. washingtonensis*⁵⁹
510. *Osmia (Melanosmia) bruneri* Cockerell, 1897. County records: **Benton**^{1,2,3}, **Chelan**¹³⁶, **Columbia**^{1,2,3}, **Garfield**^{1,2,3,46}, **Grant**^{1,2,3}, **Kittitas**^{1,2,3}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Walla Walla**³, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2,3}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3} (2015^{1,2}). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral record: FABACEAE: *Astragalus*³, *Trifolium*³; LAMIACEAE: *Salvia dorrit*³
511. *Osmia (Melanosmia) bucephala* Cresson, 1864. County records: **Clark**^{1,2}, **Garfield**^{1,2,3,46}, **Jefferson**^{1,2}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Okanogan**^{1,2,3,59}, **San Juan**^{1,2,3,136}, **Ska-manian**^{1,2}, **Stevens**^{1,2}, **Thurston**^{40,129}, **Wahkiakum**^{1,2}, **Whatcom**⁷, **Whitman**^{1,2,3,40}. Seasonality: Apr^{1,2}, May^{1,2,3,40}, Jun^{1,2,3,7,40,129}, Jul^{1,2,3} (2017¹³⁶). Collections: BBSL, CUIC, NMNH, SEMC, UCRC, WSUC. [= *Osmia subornata* Cockerell, 1897]. **Paratype**. USA, Washington, Thurston County, Olympia; 1 June 1894; Type No. 6879, USNM ENT 00536996. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: FABACEAE: *Astragalus miser* var. *serotinus*³, *Lathyrus japonicus*^{7,136}; OLEACEAE: *Syringa*³
512. †‡ *Osmia (Melanosmia) cabuilla* Cooper, 1993. County records: **Pierce**^{1,2,3}. Seasonality: Jul^{1,2,3} (1920^{1,2,3}). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
513. *Osmia (Melanosmia) calla* Cockerell, 1897. County records: **Benton**^{1,2,3}, **Klickitat**^{1,2}, **Spokane**^{1,2}, **Thurston**¹²⁹, **Whitman**^{1,2,3,6,8}. Seasonality: May^{1,2}, Jun^{1,2,6}, Jul^{1,2,3}, Aug^{1,2} (2015^{1,2}). Collections: BBSL, NMNH, WSDA, WSUC. **Paratype**. USA, Washington, Thurston County, Olympia; Kincaid; Type No. 6866. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: FABACEAE: *Astragalus*³, *Vicia villosa*⁸; HYDROPHYLACEAE: *Phacelia hastata*³
514. †‡ *Osmia (Melanosmia) cara* Cockerell, 1910. County records: **Kittitas**^{1,2,3}. Seasonality: Jul^{1,2,3} (1935^{1,2,3}). Collections: BBSL
515. † *Osmia (Melanosmia) cobaltina* Cresson, 1878. County records: **Chelan**^{1,2,3}, **Franklin**^{1,2,3}, **Grant**^{1,2,3}, **Whitman**^{2,3}. Seasonality: Apr^{1,2,3}, May^{1,2,3} (1977^{1,2,3}). Collections: BBSL, INHS
516. *Osmia (Melanosmia) cyanella* Cockerell, 1897. County records: **Asotin**³, **Chelan**^{1,2,3}, **King**^{1,2,3}, **Klickitat**^{1,2}, **Thurston**^{1,2,3,129}, **Yakima**^{1,2,4}. Seasonality: May^{1,2,3,4}, Jun^{1,2}, Jul^{1,2,3}, Aug^{1,2} (2012^{1,2}). Collections: BBSL, EMEC, NMNH, UCRC. **Type**. USA, Washington, Thurston County, Olympia; May; Kincaid; Type No. 6364

517. *Osmia (Melanosmia) cyanopoda* Cockerell, 1916. County records: **Benton**^{1,2,3}, Garfield^{1,2,3,46}, **Walla Walla**^{1,2}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3} (2012^{1,2}). Collections: BBSL. Floral records: FABACEAE: *Astragalus*³
518. *Osmia (Melanosmia) dakotensis* Michener, 1937. County records: **Benton**^{1,2}, Garfield^{1,2,46}. Seasonality: May^{1,2} (1998^{1,2}). Collections: BBSL. [= *Osmia (Melanosmia) cockerelli* Sandhouse, 1939]. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
519. † *Osmia (Melanosmia) densa* Cresson, 1864. County records: **Chelan**^{1,2,3}, **Clallam**³, **Garfield**^{1,2,3}, **Island**^{1,2,3}, **King**^{1,2,3}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2}, **San Juan**^{1,2,3}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Whatcom**³, **Whitman**^{1,2,3}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3} (2016^{1,2}). Collections: BBSL, JRYA, OSUC, UCRC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: FABACEAE: *Onobrychis*³, *Trifolium repens*³; MALVACEAE: *Sidalcea oregana*³
520. *Osmia (Melanosmia) dolerosa* Sandhouse, 1939. County records: **Chelan**³, **Clallam**³, **King**^{1,2,3,100}, **Kitsap**^{1,2,3}, **Klickitat**^{1,2}, **Okanogan**^{1,2,3}, **Pacific**^{1,2,3}, **Pierce**^{1,2,3}, **San Juan**^{2,3,100,136}, **Thurston**¹⁰⁰, **Whitman**³. Seasonality: Apr^{1,2,3}, May^{1,2,3,100}, Jun^{1,2,3,100}, Jul^{1,2,3,100}, Aug³ (2017¹³⁶). Collections: BBSL, JRYA, SEMC, UCRC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: FABACEAE: *Trifolium hybridum*³; ROSACEAE: *Rubus bifrons*¹³⁶, *R. ursinus*³
521. † *Osmia (Melanosmia) ednae* Cockerell, 1907. County records: **Spokane**^{1,2}, **Whitman**^{1,2,4}. Seasonality: May^{1,2,4} (2014^{1,2}). Collections: BBSL, PCYU. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
522. *Osmia (Melanosmia) exigua* Cresson, 1878. County records: **Klickitat**^{1,2}, **Okanogan**^{1,2,3,59}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Thurston**¹³³, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2,3}, May^{1,2,133}, Jun^{1,2,3,133}, Jul^{1,2,3}, Aug^{1,2} (2019¹³³). Collections: BBSL. Floral records: ASTERACEAE: *Hypochaeris radicata*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³; FABACEAE: *Lupinus albicaulis*¹³³, *L. lepidus*¹³³, *Trifolium repens*^{3,59}
523. *Osmia (Melanosmia) giliarum* Cockerell, 1906. County records: **Adams**^{2,101}, **King**¹⁰¹, **Kittitas**^{1,2}, **Klickitat**^{1,2}, **Thurston**¹⁰¹, **Walla Walla**^{1,2,101}, **Whitman**^{1,2,101}, **Yakima**^{1,2,101}. Seasonality: May^{1,2,101}, Jun^{1,2,101}, Jul^{1,2,101} (2012^{1,2}). Collections: BBSL, SEMC. [= *Osmia physariae* Cockerell, 1907]. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
524. †‡ *Osmia (Melanosmia) grindeliae* Cockerell, 1910. County records: **Chelan**^{1,2,3}. Seasonality: Jul^{1,2,3} (1930^{1,2,3}). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
525. *Osmia (Melanosmia) inermis* (Zetterstedt, 1838). County records: **King**^{1,2,3,31}. Collections: BBSL. Conservation status: G5 – Secure globally (NatureServe 2024)
526. *Osmia (Melanosmia) integra* Cresson, 1878. County records: **Adams**⁷, **Benton**^{1,2,3}, **Chelan**^{1,2,3}, Garfield^{1,2,3,46}, **Grant**^{1,2,3,4}, **Kittitas**^{1,2,3}, **Walla Walla**^{1,2,3,101}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2,3,7,101}, May^{1,2,3,4,101} (2014^{1,2}). Collections: BBSL, LACM, PCYU, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: FABACEAE: *Astragalus bungeanus*³; LAMIACEAE: *Salvia dorrii*³

527. † *Osmia (Melanosmia) inurbana* Cresson, 1878. County records: **Garfield**^{1,2,3}, **Thurston**¹³³, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3}. Seasonality: May^{1,2,3,133}, Jun^{1,2,3,133}, Jul¹³³ (2020¹³³). Collections: BBSL, SEMC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Crepis capillaris*¹³³, *Hypochaeris radicata*¹³³; CAPRIFOLIACEAE: *Plectritis congesta*¹³³; FABACEAE: *Lupinus bicolor*¹³³, *L. lepidus*¹³³; HYPERICACEAE: *Hypericum perforatum*¹³³; ROSACEAE: *Potentilla gracilis*¹³³
528. *Osmia (Melanosmia) juxta* Cresson, 1864. County records: **Asotin**⁷, **Chelan**^{1,2,3}, **Ferry**³, **King**^{1,2,3}, **Kittitas**³, **Klickitat**^{1,2}, **Lewis**^{1,2,4}, **Okanogan**^{1,2,3,4,59}, **San Juan**^{1,2,3}, **Spokane**^{1,2}, **Stevens**^{1,2,3}, **Thurston**^{1,2,3}, **Whitman**⁶. Seasonality: Apr^{1,2}, May^{1,2,3,4}, Jun^{1,2,3,4,6,7}, Jul^{1,2,3}, Aug^{1,2,3,4} (2015^{1,2}). Collections: BBSL, EMEC, LACM, OSUC, PCYU, UCRC, WSDA, WSUC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Arnica cordifolia*⁵⁹, *Erigeron speciosus*^{3,59}, *Microseris nutans*⁵⁹, *Taraxacum officinale*⁵⁹; FABACEAE: *Trifolium repens*^{3,59}; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹; ONAGRACEAE: *Chamerion angustifolium* ssp. *angustifolium*⁸; PLANTAGINACEAE: *Penstemon confertus*^{3,59}
529. *Osmia (Melanosmia) kincaidii* Cockerell, 1897. County records: **Benton**^{1,2,3}, **Klickitat**^{1,2}, **Okanogan**^{1,2}, **Pierce**^{1,2,3}, **Skagit**^{1,2,3}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Thurston**^{1,2,3,129}. Seasonality: Apr^{1,2}, May^{1,2}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2} (2016^{1,2}). Collections: BBSL, NMNH, WSUC. **Lectotype**. USA, Washington, Thurston County, Olympia; 2 June 1894; Type No. 3710, USNM ENT 00536951. **Paratype**. USA, Washington, Thurston County, Olympia; Kincaid; Type No. 6867. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: HYDROPHYLLACEAE: *Phacelia heterophylla*⁸; PLANTAGINACEAE: *Collinsia parviflora*⁸
530. † *Osmia (Melanosmia) laeta* Sandhouse, 1924. County records: **Klickitat**^{1,2}, **Okanogan**^{2,4}. Seasonality: Jun^{1,2}, Jul^{2,4}, Aug^{2,4} (2012^{1,2}). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
531. †§‡ *Osmia (Melanosmia) lanei* Sandhouse, 1939. County records: **Yakima**^{1,2,3}. Seasonality: Jun^{1,2,3} (1927^{1,2,3}). Collections: NMNH. **Holotype**. USA, Washington, Yakima County, Naches River; 8 June 1927; MC Lane; Type No 52872, USNM ENT 00536953. Conservation status: G3 – Vulnerable globally, possibly extirpated in Washington (NatureServe 2024)
532. *Osmia (Melanosmia) longula* Cresson, 1864. County records: **Benton**^{1,2,3}, **Chelan**¹³⁶, **Kittitas**^{1,2,3}, **Okanogan**^{1,2,3,4,59}, **Spokane**^{1,2}, **Thurston**¹²⁹, **Whitman**^{1,2,6}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2,3}, May¹²⁹, Jun^{1,2,3,6}, Jul^{1,2,3}, Aug^{1,2,3,4} (2018^{1,2,3}). Collections: BBSL, iNaturalist, WSDA. [= *Osmia grandior* Cockerell, 1897]. **Paratype**. USA, Washington, Thurston County, Olympia; 10 May 1894; Kincaid; Type No. 6869, USNM ENT 00536934. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: FABACEAE: *Astragalus columbianus*³, *A. miser* var. *miser*⁵⁹; PLANTAGINACEAE: *Penstemon washingtonensis*^{3,59}

533. † *Osmia (Melanosmia) malina* Cockerell, 1909. County records: **Chelan**^{1,2,3}, **Clallam**^{1,2,3}, **King**^{1,2,3}, **Klickitat**^{1,2}, **Wahkiakum**^{1,2}. Seasonality: May^{1,2,3}, Jun^{1,2}, Jul^{1,2,3}, Aug^{1,2} (2011^{1,2}). Collections: BBSL, OSUC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: MALVACEAE: *Sidalcea oregana*³
534. *Osmia (Melanosmia) melanopleura* Cockerell, 1916. County records: **Klickitat**^{1,2}, **Spokane**^{1,2}, **Stevens**^{1,2}, Whitman^{1,2,3,40}. Seasonality: Apr^{1,2}, May^{1,2,3,40}, Jun^{1,2} (2016^{1,2}). Collections: BBSL, INHS, SEMC. [= *Osmia bakeri* Sandhouse, 1924]
535. *Osmia (Melanosmia) nanula* Cockerell, 1897. County records: **King**^{1,2,3,100,129}, **Okanogan**^{1,2}, **Skamania**^{1,2}, **Spokane**^{1,2}, **Walla Walla**^{1,2,3}, Whitman^{1,2,3,8}. Seasonality: May^{1,2,3,129}, Jun^{1,2,3}, Jul^{1,2}, Aug^{1,2} (2016^{1,2}). Collections: BBSL, INHS, NMNH, SEMC, WSUC. **Type.** USA, Washington, King County, Seattle; 19 May 1896; Type No. 6865, USNM ENT 00536968. [= *Osmia phaceliae* Cockerell, 1907]. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: GERANIACEAE: *Geranium viscosissimum*⁸; RANUNCULACEAE: *Ranunculus*⁸
536. *Osmia (Melanosmia) nemoris* Sandhouse, 1924. County records: **Benton**^{1,2}, **Klickitat**^{1,2}, **Spokane**^{1,2}, **Thurston**^{1,2}, **Walla Walla**^{1,2,3}, Whitman^{1,2,3,8}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2}, Aug^{1,2} (2014^{1,2}). Collections: BBSL, MCZ, SEMC, WSUC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Arnica cordifolia*⁸, *Balsamorhiza sagittata*⁸
537. ‡ *Osmia (Melanosmia) nifoata* Cockerell, 1909. County records: Whitman^{1,2,3,101}, Yakima^{1,2,3,101}. Seasonality: Jun¹⁰¹, Jul^{1,2,3,101} (1904¹⁰¹). Collections: BBSL, SEMC, WSUC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Senecio*³
538. *Osmia (Melanosmia) nigrifrons* Cresson, 1878. County records: **Adams**⁷, **Benton**^{1,2,3}, Garfield^{1,2,3,46}, **King**^{1,2,3}, **Klickitat**^{1,2}, **Stevens**^{1,2}, Whitman^{1,2,3,8,101}. Seasonality: Apr^{1,2,3}, May^{1,2,3,7,101}, Jun^{1,2,3,101} (2012^{1,2}). Collections: AMNH, BBSL, EMEC, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Balsamorhiza sagittata*⁸; FABACEAE: *Astragalus*³, *Trifolium*³, *Vicia villosa*⁸
539. *Osmia (Melanosmia) nigriventris* (Zetterstedt, 1838). County records: **Okanogan**^{1,2,3,31,59}, **Pierce**^{1,2,3}, **Stevens**^{1,2}, **Whatcom**^{1,2,3}. Seasonality: Jun^{1,2}, Jul^{1,2,3,31} (2014^{1,2}). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
540. §‡ *Osmia (Melanosmia) nigrobarbata* Cockerell, 1916. County records: **Walla Walla**^{1,2,3,101}. Seasonality: May^{1,2,3,101} (1937^{1,2,3,101}). Collections: SEMC. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
541. †§ *Osmia (Melanosmia) obliqua* White, 1952. County records: **Klickitat**^{1,2}, **Spokane**^{1,2}. Seasonality: May^{1,2}, Jun^{1,2} (2014^{1,2}). Collections: BBSL. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
542. § *Osmia (Melanosmia) odontogaster* Cockerell, 1897. County records: **King**^{1,2,3}, **Okanogan**^{1,2,3,59}, **Thurston**^{1,2,3,101,129}, Whitman^{1,2,3,101}. Seasonality: Apr^{1,2},

- May^{1,2,3,101}, Jun^{1,2,3,101}, Jul^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL, NMNH, SEMC. **Paratype.** USA, Washington, Thurston County, Olympia; Kincaid; Type No. 3709. Conservation status: G2 – Imperiled globally (NatureServe 2024). Floral records: ASTERACEAE: *Erigeron nivalis*⁵⁹, *Senecio hydrophiloides*^{3,59}; FABACEAE: *Trifolium pratense*⁵⁹, *T. repens*^{3,59}; ROSACEAE: *Potentilla gracilis*^{3,59}, *Rubus ursinus*³
- 543. *Osmia (Melanosmia) paradisica* Sandhouse, 1924.** County records: **Chelan**³, Okanogan^{1,2,3,4,59}, **Pierce**^{1,2,3}, **Skagit**³, **Stevens**^{1,2}, **Whatcom**³. Seasonality: Jun^{1,2}, Jul^{1,2,3,4}, Aug^{1,2,3,4} (2016^{1,2}). Collections: BBSL, JRYA. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Anaphalis margaritacea*^{3,59}, *Erigeron speciosus*^{3,59}, *Senecio integerrimus*⁵⁹; CRASSULACEAE: *Sedum lanceolatum*⁵⁹; FABACEAE: *Lupinus*^{3,59}; PLANTAGINACEAE: *Penstemon washingtonensis*⁵⁹; POLEMONIACEAE: *Polemonium pulcherrimum*⁵⁹; ROSACEAE: *Potentilla gracilis*^{3,59}
- 544. *Osmia (Melanosmia) pentstemonis* Cockerell, 1906.** County records: **Clallam**³, **Kittitas**^{2,3}, **Klickitat**^{1,2}, Okanogan^{1,2,3,4,59}, **Pierce**^{1,2,3}, **Stevens**^{1,2}, **Whitman**^{1,2,3,8}, **Yakima**^{1,2,3}. Seasonality: Jun^{1,2,3}, Jul^{1,2,3,4}, Aug^{1,2,3,4}, Sep³ (2016^{1,2}). Collections: BBSL, JRYA, SEMC, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Erigeron speciosus*⁵⁹, *Senecio triangularis*⁵⁹, *Taraxacum officinale*⁵⁹; FABACEAE: *Trifolium repens*^{3,59}; ONAGRACEAE: *Gayophytum diffusum* ssp. *parviflorum*^{3,59}; PLANTAGINACEAE: *Penstemon albertinus*⁸, *P. serrulatus*³, *P. washingtonensis*⁵⁹; ROSACEAE: *Fragaria virginiana* ssp. *platypetala*⁵⁹
- 545. *Osmia (Melanosmia) pikei* Cockerell, 1907.** County records: **King**^{1,2,3,40}, Okanogan^{1,2,3,59}, **Thurston**⁴⁰. Seasonality: Apr^{1,2}, May^{1,2,3}, Jul^{1,2,3} (2004^{1,2,3,59}). Collections: BBSL, EMEC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Balsamorhiza sagittata*⁸; ROSACEAE: *Rubus ursinus*³
- 546. *Osmia (Melanosmia) proxima* Cresson, 1864.** County records: **Clark**^{1,2}, **Garfield**^{1,2,3,46}, **Jefferson**^{1,2}, **Klickitat**^{1,2}, Okanogan^{1,2,3,59}, **San Juan**¹³⁶, **Skamania**^{1,2}, **Spokane**^{1,2,3}, **Stevens**^{1,2}, **Wahkiakum**^{1,2}, **Whitman**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3}, Jul^{1,2}, Aug^{1,2,3} (2017¹³⁶). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: CONVULVULACEAE: *Calystegia soldanella*¹³⁶; FABACEAE: *Astragalus miser*³; ROSACEAE: *Rubus bifrons*¹³⁶
- 547. †§ *Osmia (Melanosmia) pulsatillae* Cockerell, 1907.** County records: **King**^{1,2,3}, **Whitman**^{1,2,3}. Seasonality: May^{1,2} (2003^{1,2,3}). Collections: BBSL, OSUC, SEMC. Conservation status: G2 – Imperiled globally (NatureServe 2024)
- 548. *Osmia (Melanosmia) pusilla* Cresson, 1864.** County records: **Benton**^{1,2,3}, **Clallam**³, **Clark**^{1,2}, **Cowlitz**^{1,2,3}, **Garfield**^{1,2,3,46}, **Klickitat**^{1,2}, Okanogan^{1,2,3,4,59}, **Pierce**^{1,2,3}, **Skamania**^{1,2}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Whatcom**^{1,2,3}, **Whitman**^{1,2,3,6}. Seasonality: May^{1,2,3}, Jun^{1,2,3,6}, Jul^{1,2,3,4,6}, Aug^{1,2,3}, Sep^{1,2} (2016^{1,2}). Collections: BBSL, INHS, JRYA, WSDA. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Anaphalis margaritacea*^{3,59},

- Erigeron speciosus*^{3,59}, *Taraxacum officinale*⁵⁹; BORAGINACEAE: *Myosotis laxa*⁵⁹; FABACEAE: *Astragalus chaborasicus*³, *Lupinus sericeus*⁵⁹, *Onobrychis*³, *Trifolium repens*^{3,59}; HYDROPHYLLACEAE: *Phacelia leptosepala*⁵⁹; PLANTAGINACEAE: *Penstemon confertus*⁵⁹; POLEMONIACEAE: *Polemonium pulcherrimum*⁵⁹; ROSACEAE: *Fragaria virginiana* ssp. *platypetala*^{3,59}, *Potentilla gracilis*^{3,59}
549. *Osmia (Melanosmia) raritatis* Michener, 1957. County records: **Klickitat**^{1,2}, **Spokane**^{1,2}, **Yakima**⁴⁰. Seasonality: Apr^{1,2}, May^{1,2,40} (2012^{1,2}). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
550. † *Osmia (Melanosmia) rawlini* Sandhouse, 1939. County records: **Chelan**^{1,2,3}, **Grant**^{1,2,3}, **Walla Walla**^{1,2}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2,3}, May^{1,2,3} (2012^{1,2}). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: LAMIACEAE: *Salvia dorrii*³
551. *Osmia (Melanosmia) regulina* Cockerell, 1911. County records: **Garfield**^{1,2,3,46}, **Klickitat**^{1,2}, **Walla Walla**^{1,2,3,71}. Seasonality: Jun^{1,2,3}, Aug^{1,2,3} (2012^{1,2}). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: FABACEAE: *Astragalus cicer*³
552. *Osmia (Melanosmia) sculleni* Sandhouse, 1939. County records: **Klickitat**^{1,2}, **Okanogan**^{1,2,3,59}, **Spokane**^{1,2}. Seasonality: Apr^{1,2}, May^{1,2}, Jun^{1,2}, Jul^{1,2}, Aug^{1,2,3} (2015^{1,2}). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Arnica cordifolia*^{3,59}
553. † *Osmia (Melanosmia) sedula* Sandhouse, 1924. County records: **Klickitat**^{1,2}, **Thurston**^{1,2}. Seasonality: May^{1,2}, Jun^{1,2} (2011^{1,2}). Collections: BBSL. [= *Osmia claremontensis* Michener, 1936]. Conservation status: G5 – Secure globally (NatureServe 2024)
554. *Osmia (Melanosmia) simillima* Smith, 1853. County records: **Clallam**³, **Garfield**^{1,2,3,46}, **Island**^{1,2,3}, **Jefferson**^{1,2}, **King**^{1,2,3}, **Pacific**^{1,2,3}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Thurston**^{1,2,3}, **Whatcom**⁷, **Whitman**^{1,2,3,6}, **Yakima**^{1,2,3}. Seasonality: Apr^{1,2}, May^{1,2,3}, Jun^{1,2,3,6,7}, Jul^{1,2,3}, Aug^{1,2,3} (2016^{1,2}). Collections: BBSL, EMEC, JRYA, SEMC, WSDA, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: FABACEAE: *Astragalus chaborasicus*³, *Lathyrus japonicus*⁷, *Trifolium repens*³
555. *Osmia (Melanosmia) tanneri* Sandhouse, 1939. County records: **Okanogan**^{1,2,3,4,59}. Seasonality: Jul^{1,2,3,4}, Aug^{1,2} (2004^{1,2,3,4,59}). Collections: BBSL. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: FABACEAE: *Oxytropis campestris* var. *cusickii*⁵⁹; PLANTAGINACEAE: *Penstemon washingtonensis*⁵⁹; POLEMONIACEAE: *Polemonium pulcherrimum*⁵⁹; ROSACEAE: *Dryas hookeriana*⁵⁹
556. †§ *Osmia (Melanosmia) thysanisca* Michener, 1957. County records: **Whitman**⁷, **Yakima**^{1,2}. Seasonality: Apr⁷, Jul^{1,2} (1973⁷). Collections: SEMC, WSUC. Conservation status: G3 – Vulnerable globally (NatureServe 2024)
557. *Osmia (Melanosmia) trevoris* Cockerell, 1897. County records: **Benton**^{1,2,3}, **Clark**^{1,2}, **Columbia**^{1,2,3}, **Franklin**⁹⁷, **Garfield**^{1,2,3,4,46}, **King**^{1,2,3,129}, **Kittitas**^{1,2,3}, **Klickitat**^{1,2}, **Okanogan**^{1,2,3,4,59}, **Skamania**^{1,2}, **Spokane**^{1,2,3}, **Stevens**^{1,2}, **Thurston**^{1,2,3}, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3,6,7}. Seasonality: Apr^{1,2,3}, May^{1,2,3,4,129}, Jun^{1,2,3,4,6,7},

- Jul^{1,2,3,6}, Aug^{1,2,3,4} (2016^{1,2}). Collections: BBSL, INHS, NMNH, PCYU, SEMC, WSDA, WSUC. **Type.** USA, Washington, King County, Seattle; 19 May 1896; Type No. 1895, USNM ENT 00537003. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Erigeron corymbosus*^{3,59}, *E. speciosus*^{3,59}; FABACEAE: *Astragalus*³
558. †§ *Osmia (Melanosmia) trifoliama* Sandhouse, 1939. County records: **Klickitat**^{1,2}, **San Juan**^{1,2,3}. Seasonality: Jul^{1,2}, Aug^{1,2} (2011^{1,2}). Collections: BBSL, PWRC. Conservation status: G3 – Vulnerable globally, possibly extirpated in Washington (NatureServe 2024)
559. *Osmia (Melanosmia) tristella* Cockerell, 1897. County records: **Chelan**³, **Clallam**^{1,2,3}, **King**^{1,2,3}, **Okanogan**^{1,2,3,4,59}, **Pierce**^{1,2,3}, **Spokane**^{1,2}, **Stevens**^{1,2}, **Thurston**^{1,2,3,129}, **Walla Walla**⁷, **Yakima**^{1,2,3}. Seasonality: Jan^{1,2}, Mar^{1,2}, Apr^{1,2,3}, May^{1,2,3,7}, Jun^{1,2,3}, Jul^{1,2,3}, Aug^{1,2,3,4} (2015^{1,2}). Collections: BBSL, EMEC, JRYA, NMNH, WSUC. **Type.** USA, Washington, Thurston County, Olympia; Kincaid; Type No. 6863, USNM ENT 00537005. Conservation status: G4 – Apparently Secure globally (NatureServe 2024). Floral records: ASTERACEAE: *Agoseris glauca* var. *dasycephala*⁵⁹, *Arnica cordifolia*⁵⁹, *Erigeron speciosus*^{3,59}, *Senecio triangularis*⁵⁹, *Taraxacum officinale*⁵⁹; FABACEAE: *Lupinus*⁵⁹, *Trifolium pratense*^{3,59}, *T. repens*⁵⁹; HYDROPHYLLACEAE: *Phacelia leptsepala*⁵⁹; ONAGRACEAE: *Gayophytum diffusum* spp. *parviflorum*^{3,59}; OROBRANCHACEAE: *Castilleja miniata*⁵⁹; PLANTAGINACEAE: *Penstemon*³, *P. confertus*⁵⁹; POLEMONIACEAE: *Polemonium pulcherrimum*^{3,59}; ROSACEAE: *Fragaria virginiana* ssp. *platypetala*⁵⁹, *Potentilla gracilis*⁵⁹
560. *Osmia (Melanosmia) unca* Michener, 1937. County records: **Benton**^{1,2}, **Garfield**⁴⁶, **Walla Walla**^{1,2,3}, **Whitman**^{1,2,3,101}. Seasonality: Apr^{1,2}, May^{1,2,3,101}, Jun^{1,2,3} (2014^{1,2}). Collections: BBSL, SEMC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
561. *Osmia (Melanosmia) vandykei* Sandhouse, 1924. County records: **Benton**^{1,2}, **Klickitat**^{1,2}, **Spokane**^{1,2}, **Whitman**^{1,2,3,40}. Seasonality: Mar^{1,2,3}, Apr^{1,2}, May^{1,2}, Jun^{1,2} (2016^{1,2}). Collections: BBSL, SEMC. Conservation status: G4 – Apparently Secure globally (NatureServe 2024)
562. †* *Osmia (Osmia) cornifrons* (Radoszkowski, 1887). County records: **King**², **Thurston**^{1,2}. Seasonality: Mar^{1,2}, Apr² (2021^{1,2}). Collections: BugGuide, iNaturalist. Conservation status: G5 – Secure globally (NatureServe 2024)
563. *Osmia (Osmia) lignaria* Say, 1837. County records: **Adams**³, **Chelan**^{1,2,3}, **Clallam**^{1,2,3}, **Clark**^{1,2}, **Cowlitz**^{1,2}, **Ferry**², **Grant**^{1,2,3}, **Island**^{1,2,3}, **Jefferson**^{1,2}, **King**^{1,2,3}, **Kitsap**^{1,2,3}, **Klickitat**^{1,2}, **Mason**^{1,2}, **Okanogan**^{1,2,3}, **Pacific**^{1,2,3}, **Pierce**^{1,2,3}, **San Juan**^{1,2,3}, **Skagit**^{2,3,10}, **Snohomish**^{1,2,3}, **Spokane**^{1,2,3}, **Stevens**^{1,2,3}, **Thurston**^{1,2,3,6,133}, **Walla Walla**^{2,3}, **Whatcom**^{1,2,3}, **Whitman**^{1,2,3}, **Yakima**^{1,2,3}. Seasonality: Feb^{1,2}, Mar^{1,2,3}, Apr^{1,2,3}, May^{1,2,3,133}, Jun^{1,2,3,6}, Jul^{1,2}, Aug^{1,2,3}, Nov³, Dec^{1,2} (2022^{1,2}). Collections: BBSL, BugGuide, CUIIC, iNaturalist, INHS, NCSU, PMNH, SEMC, UCMC, WSDA, WSUC. Conservation status: G5 – Secure globally (NatureServe 2024). Floral records: ASPARAGACEAE: *Camassia quamash*¹³³; ASTERACEAE: *Arnica cordifolia*⁸, *Taraxacum*³; FABACEAE: *Astragalus sinuatus*³; HYDROPHYLLACEAE: *Phacelia heterophylla*⁸

Genus *Protosmia* Ducke

564. *Protosmia* (*Chelostomopsis*) *rubifloris* (Cockerell, 1898). County records: Chelan^{1,2,130}, King^{1,2,96}, **Okanogan**^{1,2}, Thurston^{1,2,104}. Seasonality: Apr^{130,104}, May^{1,2}, Jun^{1,2} (2021^{1,2}). Collections: BBSL, iNaturalist, NMNH. [= *Chelynia rubifloris* Cockerell, 1898]. **Holotype**. USA, Washington, King County, Seattle. Floral records: BORAGINACEAE: *Hackelia venusta*⁷

Melittidae: Melittinae: Macropidini

Genus *Macropis* Panzer

565. §‡ *Macropis* (*Macropis*) *steironematis opaca* Michener, 1938. County records: Yakima^{1,2,45,112}. Seasonality: Jul^{1,2,45,112} (1882^{1,2,45,112}). Collections: MCZ. **Holotype**. USA, Washington Territory, Yakima River, Morgan's Ferry; 1 July 1882; MCZ Type 23415, MCZ-ENT 00023415. Conservation status: Critically Endangered (National Research Council 2007)

Bee species likely to occur in Washington

Andrenidae

- Andrena* (*Achandrena*) *angustella* Cockerell, 1936
Andrena (*Andrena*) *edwardsi* Viereck, 1916
Andrena (*Callandrena*) *vulpicolor* Cockerell, 1897
Andrena (*Cnemidandrena*) *apacheorum* Cockerell, 1897
Andrena (*Derandrena*) *vandykei* Cockerell, 1936
Andrena (*Diandrena*) *ablegata* (Cockerell, 1922)
Andrena (*Melandrena*) *regularis* Malloch, 1917
Andrena (*Parandrena*) *concinna* Cockerell, 1898
Andrena (*Parandrena*) *gibberis* Viereck, 1924
Andrena (*Parandrena*) *papagorum* Viereck & Cockerell, 1914
Andrena (*Ptilandrena*) *penemisella* LaBerge & Ribble, 1975
Andrena (*Scaphandrena*) *cruciferarum* Ribble, 1974
Andrena (*Scaphandrena*) *plana* Viereck, 1904
Calliopsis (*Nomadopsis*) *anthidius* Fowler, 1899
Panurginus *beardsleyi* (Cockerell, 1904)
Perdita (*Perdita*) *claypolei limatula* Timberlake, 1962*
Perdita (*Perdita*) *exclamans* Cockerell, 1895

* We are aware of unpublished records for these species in Washington which could not be included in this checklist.

Perdita (Perdita) fallax Cockerell, 1896
Perdita (Perdita) nuda Cockerell, 1896
Perdita (Perdita) oreophila Timberlake, 1964
Perdita (Perdita) stottleri Cockerell, 1896
Perdita (Perdita) subfasciata Cockerell, 1897
Perdita (Perdita) zebrata Cresson, 1878
Perdita (Pygoperdita) mormonica Timberlake, 1956
Protandrena (Pterosarus) innuptus (Cockerell, 1896)
Protandrena (Pterosarus) irregularis (Cockerell, 1922)

Apidae

Anthophora (Micranthophora) maculifrons Cresson, 1879
Anthophora (Pyganthophora) lesquerellae (Cockerell, 1896)
Biastes (Neopasites) fulviventris (Cresson, 1878)*
Bombus (Psithyrus) variabilis (Cresson, 1872)**
Eucera (Synhalonia) chrysophila (Cockerell, 1914)
Eucera (Synhalonia) cordleyi (Viereck, 1905)
Melecta edwardsii Cresson, 1879
Melissodes (Callimelissodes) lustrus LaBerge, 1961
Melissodes (Callimelissodes) minusculus LaBerge, 1961
Melissodes (Callimelissodes) nigracauda LaBerge, 1961*
Melissodes (Eumelissodes) confusus Cresson, 1878
Melissodes (Melissodes) tepidus yumensis LaBerge, 1956
Nomada accepta Cresson, 1878
Nomada calloxantha Cockerell, 1921
Nomada citrina rufula Cockerell, 1903
Nomada depressa Cresson, 1863
Nomada erythraea Dalla Torre, 1896
Nomada hemphilli Cockerell, 1903
Nomada opposita Cresson, 1878***
Nomada scitiformis Cockerell, 1903
Nomada taraxacella Cockerell, 1903
Nomada ultimella Cockerell, 1903
Nomada valida Smith, 1854
Nomada vicinalis vicinalis Cresson, 1878

** Mayer et al. (2000) states that their Moscow Mountain site is located in southeastern Washington; however, further investigation revealed that the Moscow Mountain site may, in fact, be located across the border in Idaho.

*** Discover Life has synonymized these species with other species already in the checklist without reference or explanation. As we are not aware of any publications that synonymize these species, these species are kept separate here.

Triepeolus balteatus Cockerell, 1921

Triepeolus bihamatus (Cockerell, 1907)

Triepeolus utahensis (Cockerell, 1921)

Xenoglossa (*Peponapis*) *pruinosa* (Say, 1837)

Halictidae

Agapostemon (*Agapostemon*) *melliventris* Cresson, 1874

Dieunomia nevadensis (Cresson, 1874)

Dufourea dilatipes Bohart, 1948*

Lasioglossum (*Dialictus*) *abundipunctum* Gibbs, 2010

Lasioglossum (*Dialictus*) *pavoninum* (Ellis, 1913)

Lasioglossum (*Dialictus*) *planatum* (Lovell, 1905)

Lasioglossum (*Dialictus*) *sagax* (Sandhouse, 1924)

Lasioglossum (*Dialictus*) *subversans* (Mitchell, 1960)

Lasioglossum (*Dialictus*) *yukonae* Gibbs, 2010

Lasioglossum (*Hemihalictus*) *diatretum* (Vachal, 1904)

Lasioglossum (*Hemihalictus*) *pulveris* (Cockerell, 1930)

Lasioglossum (*Lasioglossum*) *paraforbesii* McGinley, 1986

Lasioglossum (*Sphecodogastra*) *nigrum* (Viereck, 1903)

Lasioglossum (*Sphecodogastra*) *peraltum* (Cockerell, 1901)

Sphecodes confertus Say, 1837***

Sphecodes eustictus Cockerell, 1906

Sphecodes lautipennis Cockerell, 1908

Sphecodes patruelis Cockerell, 1913

Megachilidae

Anthidiellum (*Loyolanthidium*) *ehrhorni* (Cockerell, 1900)

Anthidium (*Anthidium*) *maculosum* Cresson, 1878

Anthidium (*Anthidium*) *palliventre* Cresson, 1878

Anthidium (*Anthidium*) *placitum* Cresson, 1879

Ashmeadiella (*Ashmeadiella*) *gillettei* Titus, 1904

Atoposmia (*Atoposmia*) *abjecta* (Cresson, 1878)

Atoposmia (*Atoposmia*) *oregona* (Michener, 1943)

Coelioxys (*Synocoelioxys*) *alternatus* Say, 1837

Coelioxys (*Synocoelioxys*) *apacheorum* Cockerell, 1900

Coelioxys (*Boreocoelioxys*) *banksi* Crawford, 1914

Coelioxys (*Cyrtocoelioxys*) *deani* Cockerell, 1909

Coelioxys (*Paracoelioxys*) *funerarius* Smith, 1854

Coelioxys (*Synocoelioxys*) *hunteri* Crawford, 1914

Coelioxys (*Boreocoelioxys*) *porterae* Cockerell, 1900

Hoplitis (*Proteriades*) *boharti* (Timberlake & Michener, 1950)

Hoplitis (*Proteriades*) *linsdalei* Michener, 1947

Megachile (Litomegachile) gentilis Cresson, 1872
Megachile (Megachile) inermis Provancher, 1888
Megachile (Litomegachile) lippiae Cockerell, 1900****
Megachile (Chelostomoides) odontostoma Cockerell, 1924
Megachile (Megachiloides) pseudonigra Mitchell, 1927
Megachile (Pseudocentron) sidalceae Cockerell, 1897
Osmia (Melanosmia) cyaneonitens Cockerell, 1906*
Osmia (Melanosmia) gaudiosa Cockerell, 1907
Osmia (Melanosmia) indepressa Sandhouse, 1939*
Osmia (Osmia) ribifloris Cockerell, 1900
Osmia (Melanosmia) tarsata Provancher, 1888
Stelis (Stelis) interrupta Cresson, 1879

Melittidae

Hesperapis (Carinapis) carinata Stevens, 1919
Macropis (Macropis) nuda (Provancher, 1882)

Records excluded from analysis

We highlight 38 records as questionable and propose that they require more research to confirm their presence in Washington state. Many of these would be significant and surprising range expansions. Most of these records were obtained from data made available through GBIF, Discover Life, or BOLD, and could represent species that are mislabeled or misidentified in their parent collections. A few records were derived from identifications recorded in older revisions and may reflect outdated taxonomy. We do not include these records in the total bees recorded by state or county and highlight them here to ensure they are treated with appropriate caution.

Andrenidae

1. ! *Andrena (Andrena) mandibularis* Robertson, 1892 – Yakima^{2,3}; Apr^{2,3} (1987^{2,3}); INHS

Comments. This species is generally eastern in distribution.

2. ! *Andrena (Andrena) tridens* Robertson, 1902 – Kittitas^{2,3}; May^{2,3} (1989^{2,3}); INHS

Comments. This species is generally eastern in distribution.

**** Sheffield et al. (2011) raised *Megachile lippiae* from a subspecies of *Megachile texana*. It is possible records of *M. lippiae* in Washington already exist under the name *M. texana*.

3. ! *Andrena* (*Cnemidandrena*) *luteihirta* Donovan, 1977 – Benton⁷; Jul⁷ (1994⁷); WSUC

Comments. This species is generally restricted to southern California, west of the Sierra Nevada mountains. A positive identification requires examination of genitalia; this specimen (which is a male with the genitalia hidden) is more likely the closely related *A. surda* which occurs east and north of the Sierra Nevada range.

4. ! *Andrena* (*Conandrena*) *cheyennorum* Viereck and Cockerell, 1914 – Whitman^{2,3}; (2003^{2,3}); BBSL

Comments. This species is generally southwestern in distribution

5. ! *Andrena* (*Melandrena*) *sayi* Robertson, 1891 – Snohomish^{1,3}; Aug^{1,3} (1985^{1,3}); INHS

Comments. This species is generally eastern in distribution.

6. ! *Andrena* (*Onagrandrena*) *rozeni* Linsley and MacSwain, 1955 – King^{2,3}; May^{2,3} (1914^{2,3}); INHS

Comments. This species is generally southwestern in distribution.

7. ! *Andrena* (*Ptilandrena*) *erigeniae* Robertson, 1891 – Kittitas^{2,3}; Apr^{2,3} (1989^{2,3}); INHS

Comments. This species is generally eastern in distribution.

8. ! *Calliopsis* (*Nomadopsis*) *obscurella* Cresson, 1879 – Franklin¹¹⁸; May¹¹⁸ (1896¹¹⁸)

Comments. Older identification - Rozen (1958) recommends these records be taken with caution until the specimens have either been examined or other records in the distributional gap are confirmed.

9. ! *Perdita* (*Perdita*) *aridella* Timberlake, 1960 – Benton^{1,2}; May^{1,2}, Jun^{1,2}, Aug^{1,2} (2015^{1,2}); BBSL

Comments. This species is generally southwestern in distribution.

10. ! *Perdita* (*Perdita*) *ashmeadi* Cockerell, 1899 – Columbia^{1,2,4}; PCYU

Comments. This species is generally southwestern in distribution. Additionally, *P. ashmeadi* is a specialist on *Prosopis* spp. (Simpson and Neff 1987) which do not occur in Washington state.

Apidae

11. ! *Anthophora (Clisodon) furcata* (Panzer, 1798) – Grays Harbor^{1,2}, Pierce^{1,2}; Jul^{1,2} (1935^{1,2}); SEMC

Comments. This species is generally European in distribution. However, *A. terminalis* was sometimes considered a subspecies of *A. furcata* (Muesebeck et al. 1951; Hurd 1979) and sometimes a full species (Mitchell 1962). These records are likely older identifications of *A. terminalis*.

12. ! *Anthophorula (Anthophorula) rufiventris* (Timberlake, 1947) – no location reported^{2,4}; PCYU

Comments. This species is generally southwestern in distribution.

13. ! *Bombus (Alpinobombus) polaris* Curtis, 1835 – Thurston^{1,2}, Yakima^{1,2}; Jul^{1,2}, Aug^{1,2} (1971^{1,2}); NMNH; Data Deficient (Hatfield et al. 2016b)

Comments. This species is generally arctic in distribution.

14. ! *Bombus (Bombus) terricola* Kirby, 1837 – San Juan^{1,2,3}, Whitman^{1,2}, Yakima^{1,2}; May^{1,2,3}, Aug^{1,2} (1959^{1,2}); INHS, PMNH; Vulnerable (National Research Council 2007; Hatfield et al. 2015c); G3 – Vulnerable globally (NatureServe 2024)

Comments. Milliron (1971) considered *Bombus occidentalis* a subspecies of *B. terricola*; however, current taxonomy classifies *B. occidentalis* as a distinct species (e.g., Bertsch et al. 2010; Williams et al. 2012; Owen and Whidden 2013). It is probable that these records represent *B. occidentalis*.

15. ! *Bombus (Psithyrus) ashtoni* (Cresson, 1864) – Whitman^{1,2,3}; Oct^{1,2,3} (1960^{1,2,3}); BBSL; Data Deficient (Hatfield et al. 2016c); G4 – Apparently Secure globally (NatureServe 2024)

Comments. This species is generally northern and eastern in distribution.

16. ! *Bombus (Pyrobombus) ternarius* Say, 1837 – Whitman¹; Oct¹ (1950¹); PSUC; Least Concern (Hatfield et al. 2014i)

Comments. This species is generally northeastern and northcentral in distribution.

17. ! *Bombus (Subterraneobombus) borealis* Kirby, 1837 – Clallam^{1,2,3}; Sep^{1,2,3} (1955^{1,2,3}); CNC; Least Concern (Hatfield et al. 2015o)

Comments. This species is generally northeastern and northcentral in distribution.

18. ! *Bombus (Thoracobombus) pensylvanicus* (DeGeer, 1773) – Mason^{1,2,3}, Thurston^{1,2,3}; Aug^{1,2,3} (1908^{1,2,3}); BBSL; Vulnerable (Hatfield et al. 2015q)

Comments. This species is generally eastern and southwestern in distribution.

19. ! *Habropoda depressa* Fowler, 1899 – Walla Walla^{1,2}; May^{1,2} (1937^{1,2}); SEMC; G4 – Apparently Secure globally (NatureServe 2024)

Comments. This species is generally southwestern in distribution.

20. ! *Melissodes (Eumelissodes) bicoloratus* LaBerge, 1961 – Benton^{1,2}; Jun^{1,2} (2014^{1,2}); BBSL

Comments. This species is generally southwestern in distribution.

21. ! *Melissodes (Eumelissodes) druriellus* (Kirby, 1802) [= *Melissodes rustica* (Say, 1837)] – Benton^{1,2}; Jun^{1,2} (2014^{1,2}); BBSL

Comments. This species is generally eastern and midwestern in distribution.

22. ! *Melissodes (Eumelissodes) utahensis* LaBerge, 1961 – Yakima^{2,3}; Sep^{2,3} (1993^{2,3}); INHS

Comments. This species is generally southwestern in distribution.

23. ! *Nomada argentea* (Schwarz, 1966) – Walla Walla^{1,2,3}; Jun^{1,2,3} (1951^{1,2}); BBSL

Comments. This species is Middle Eastern in distribution.

24. ! *Triepeolus lunatus* (Say, 1824) – Klickitat^{1,2}; Aug^{1,2} (2011^{1,2}); BBSL

Comments. This species is generally eastern and midwestern in distribution.

25. ! *Triepeolus verbesinae* (Cockerell, 1897) – Klickitat^{1,2}, Stevens³; Jul³, Sep^{1,2} (2011^{1,2}); BBSL, NMNH

Comments. This species is generally southwestern in distribution.

Halictidae

26. ! *Agapostemon (Agapostemon) sericeus* (Forster, 1771) [= *Agapostemon radiatus* Say, 1837] – Douglas^{1,2}, Franklin¹¹⁹; May^{1,2} (1905^{1,2}); FMNH

Comments. This species is normally distributed east of the Rocky Mountains.

27. ! *Augochloropsis (Paraugochloropsis) sumptuosa* (Smith, 1853) – Spokane^{1,2,3}; Jun^{1,2}, Jul^{1,2} (2007^{1,2,3}); BBSL

Comments. This species is generally eastern and midwestern in distribution.

28. ! *Halictus (Nealictus) parallelus* Say, 1837 – Kittitas^{1,2}; Aug^{1,2} (1967^{1,2}); FMNH

Comments. This species is generally eastern and midwestern in distribution.

Megachilidae

29. ! *Anthidium (Anthidium) collectum* Huard, 1896 – G3 – Vulnerable globally (NatureServe 2024)

Comments. Gonzalez and Griswold (2013) make note of an isolated record from south central Washington well outside the expected distribution, but do not provide a specific locality.

30. ! *Coelioxys (Boreocoelioxys) insita* Cresson, 1872 – Columbia^{1,2,4}; PCYU

Comments. This species is generally midwestern in distribution.

31. ! *Dianthidium (Dianthidium) dubium* H. F. Schwarz, 1928 – Spokane^{1,2}; Jun^{1,2}, Jul^{1,2} (2015^{1,2}); BBSL

Comments. This species is generally southwestern in distribution.

31a. ! *Dianthidium (Dianthidium) dubium mccrackenae* Timberlake, 1943 – Benton^{1,2}, Walla Walla^{1,2}; Jun^{1,2}, Jul^{1,2} (2014^{1,2}); BBSL

Comments. This subspecies is generally southwestern in distribution.

32. ! *Hoplitis (Hoplitis) samarkanda* (Warncke, 1991) – Garfield^{1,2,3}; (1998^{1,2,3}); BBSL

Comments. This species is generally Palearctic in distribution.

33. ! *Megachile (Xanthosarus) latimanus* Say, 1823 [= *Megachile vidua* Smith, 1853] – San Juan²⁴, Thurston²⁴, Whitman^{1,2}, Yakima^{1,2}; Jul^{1,2,24}, Aug²⁴ (1949^{1,2}); CMNH, MCZ; G5 – Secure globally (NatureServe 2024)

Comments. This species is generally only found east of the 100th meridian. *Megachile latimanus* and *M. perihirta* are considered an eastern and western sibling pair with only subtle characters distinguishing *M. latimanus* females from *M. perihirta* females.

34. ! *Osmia (Diceratosmia) subfasciata* Cresson, 1872 – King^{1,2,3}; Jul^{1,2,3} (1929^{1,2,3}); BBSL; G5 – Secure globally (NatureServe 2024); LAMIACEAE: *Prunella vulgaris*³

Comments. This species is generally southern in distribution.

35. ! *Osmia (Melanosmia) crassa* Rust and Bohart, 1986 – Walla Walla^{1,2,3}; May^{1,2,3} (1937^{1,2,3}); BBSL

Comments. This species is generally southwestern in distribution.

36. ! *Osmia (Melanosmia) granulosa* Cockerell, 1911 – Walla Walla^{2,3}; May^{2,3} (1937^{2,3}); BBSL; G4 – Apparently Secure globally (NatureServe 2024)

Comments. Hurd (1979) synonymized *O. granulosa* with *O. exigua* without explanation. As this record and a single record from Wyoming are the only records of *O. granulosa* outside of California, NatureServe (2024) suggests that these records could possibly be *O. exigua*.

37. ! *Osmia (Melanosmia) phenax* Cockerell, 1897 [= *Osmia titusi* Cockerell, 1905] – Stevens^{1,2}; Jun^{1,2}, Jul^{1,2} (2015^{1,2}); BBSL

Comments. This species is generally southwestern in distribution.

38. ! *Stelis (Stelis) robertsoni* Timberlake, 1941 – Spokane¹; Jul¹ (2015¹); BBSL

Comments. This species is generally southwestern in distribution.

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References

- Adlakha RL (1969) A systematic revision of the bee genus *Diadasia* Patton in America north of Mexico (Hymenoptera: Anthophoridae). PHD Thesis. University of California (Davis).
- Akre RD, Cutts EP, Zack RS, Klostermeyer EC (1982) Gynandromorphs of *Megachile rotundata* (Fab.) (Hymenoptera: Megachilidae). *Entomological News* 93(4): 85–94.
- Andrikopoulos CJ, Cane JH (2018) Comparative pollination efficacies of five bee species on raspberry. *Journal of Economic Entomology* 111(6): 2513–2519. <https://doi.org/10.1093/jee/toy226>
- Ascher JS, Pickering J (2022) Discover Life bees species guide and world checklist (Hymenoptera: Apoidea: Anthophila). www.discoverlife.org/mp/20q?search=Apoidea [accessed on 19 October 2022].
- Baker JR (1975) Taxonomy of five Nearctic subgenera of *Coelioxys* (Hymenoptera: Megachilidae). *The University of Kansas Science Bulletin* 50(12): 649–730.
- Bertsch A, Hrabé de Angelis M, Przemeck GKH (2010) A phylogenetic framework for the North American bumblebee species of the subgenus *Bombus* sensu stricto (*Bombus affinis*, *B. franklini*, *B. moderatus*, *B. occidentalis* and *B. terricola*) based on mitochondrial DNA markers (Hymenoptera: Apidae: *Bombus*). *Beitraege zur Entomologie* 60: 229–242. <https://doi.org/10.21248/contrib.entomol.60.1.229-242>
- Best L, Feuerborn C, Holt J, Kincaid S, Marshall CJ, Melathopolous A, Robinson SVJ (2021) Oregon Bee Atlas: native bee findings from 2018. *Catalog of the Oregon State Arthropod Collection* 5(1): 1–12. https://doi.org/10.5399/osu/cat_osac.5.1.4647
- Best L, Engler JD, Feuerborn C, Larsen J, Lindh B, Marshall CJ, Melathopoulos A, Kincaid S, Robinson SVJ (2022) Oregon Bee Atlas: Wild bee findings from 2019. *Catalog of the Oregon State Arthropod Collection* 6(1): 1–13. https://doi.org/10.5399/osu/cat_osac.6.1.4906
- Black AE, Strand E, Wright RG, Scott JM, Morgan P, Watson C (1998) Land use history at multiple scales: implications for conservation planning. *Landscape and Urban Planning* 43: 49–63. [https://doi.org/10.1016/S0169-2046\(98\)00096-6](https://doi.org/10.1016/S0169-2046(98)00096-6)
- Bohart GE (1948) New North American bees of the genus *Dufourea* (Hymenoptera: Halictidae). *Annals of the Entomological Society of America* 41: 119–136. <https://doi.org/10.1093/aesa/41.1.119>
- Bossert S, Murray EA, Almeida EAB, Brady SG, Blaimer BB, Danforth BN (2019) Combining transcriptomes and ultraconserved elements to illuminate the phylogeny of Apidae. *Molecular Phylogenetics and Evolution* 130: 121–131. <https://doi.org/10.1016/j.ympev.2018.10.012>
- Bossert S, Copeland RS, Sless TJL, Branstetter MG, Gillung JP, Brady SG, Danforth BN, Polcarová J, Straka J (2020) Phylogenomic and morphological reevaluation of the bee tribes Biastini, Neolarrini, and Townsendiellini (Hymenoptera: Apidae) with description of three new species of *Schwarzia*. *Insect Systematics and Diversity* 4(6): 1–29. <https://doi.org/10.1093/isd/ixaa013>
- Bouseman JK, LaBerge WE (1978) A revision of the bees of the genus *Andrena* of the Western Hemisphere. Part IX. Subgenus *Melandrena*. *Transactions of the American Entomological Society* 104(3/4): 275–389.

- Broemeling DK (1988) A revision of the *Nomada* subgenus *Nomadita* of North America (Hymenoptera: Anthophoridae). *Pan-Pacific Entomologist* 64(4): 321–344.
- Brooks RW (1983) Systematics and bionomics of *Anthophora*: the Bomboides Group and species groups of the new world. *University of California Publications in Entomology* 98: 1–86.
- Brown MJF, Paxton RJ (2009) The conservation of bees: a global perspective. *Apidologie* 40: 410–416. <https://doi.org/10.1051/apido/2009019>
- Cane JH (2008) A native ground-nesting bee (*Nomia melanderi*) sustainably managed to pollinate alfalfa across an intensively agricultural landscape. *Apidologie* 39: 315–323. <https://doi.org/10.1051/apido:2008013>
- Cane JH (2011) Meeting wild bee's needs on western US rangelands. *Rangelands* 33(3): 27–32. <https://doi.org/10.2111/1551-501X-33.3.27>
- Cane JH (2024) The extraordinary alkali bee, *Nomia melanderi* (Halictidae) the world's only intensively managed ground-nesting bee. *Annual Review of Entomology* 69: 99–116. <https://doi.org/10.1146/annurev-ento-020623-013716>
- Cane JH, Eickwort GC, Wesley FR, Spielholz J (1983) Foraging, grooming and mate-seeking behaviors of *Macropis nuda* (Hymenoptera, Melittidae) and use of *Lysimachia ciliata* (Primulaceae) oils in larval provisions and cell linings. *The American Midland Naturalist* 110(2): 257–264. <https://doi.org/10.2307/2425267>
- Carpenter FM (1931) Insects from the Miocene (Latah) of Washington. *Annals of the Entomological Society of America* 24(2): 307–309. <https://doi.org/10.1093/aesa/24.2.307>
- Chang W, Cheng J, Allaire J, Sievert C, Schloerke B, Xie Y, Allen J, McPherson J, Dipert A, Borges B (2024) shiny: Web Application Framework for R. R package version 1.8.1.1, <https://CRAN.R-project.org/package=shiny>
- Cheng J, Schloerke B, Karambelkar B, Xie Y (2024) leaflet: Create Interactive Web Maps with the JavaScript 'Leaflet' Library. R package version 2.2.2. <https://CRAN.R-project.org/package=leaflet>
- Clement SL, Griswold TL, Rust RW (2006) Bee associates of flowering *Astragalus* and *Onobrychidis* genebank accessions at a Snake River site in Eastern Washington. *Journal of the Kansas Entomological Society* 79(3): 254–260. <https://doi.org/10.2317/0505.02.1>
- Cockerell TDA (1903) North American bees of the genus *Nomada*. *Proceedings of the Academy of Natural Sciences of Philadelphia* 55: 559–614.
- Cockerell TDA (1904) II – Some parasitic bees. *Annals and Magazine of Natural History* 13: 33–42. <https://doi.org/10.1080/00222930409487052>
- Cockerell TDA (1906a) Descriptions and records of bees – XII. *Annals and Magazine of Natural History* 18: 69–75. <https://doi.org/10.1080/00222930608562581>
- Cockerell TDA (1906b) Some bees from Washington State. *The Canadian Entomologist* 38: 277–282. <https://doi.org/10.4039/Ent38277-8>
- Cockerell TDA (1910) Some bees of the genus *Nomada* from Washington State. *Psyche* 17(3): 91–98. <https://doi.org/10.1155/1910/10935>
- Cockerell TDA (1911) Descriptions and records of bees – XXXIX. *Annals and Magazine of Natural History* 8: 660–673. <https://doi.org/10.1080/00222931108693076>
- Cockerell TDA (1912) Names applied to bees of the genus *Osmia*, found in North America. *Proceedings of the United States National Museum* 42: 215–225. <https://doi.org/10.5479/si.00963801.42-1897.215>

- Cockerell TDA (1913) Descriptions and records of bees – XLVIII. *Annals and Magazine of Natural History* 11: 54–65. <https://doi.org/10.1080/00222931308693292>
- Cockerell TDA (1937) Bees collected in Arizona and California in the spring of 1937. *American Museum Novitates* 948: 1–15.
- Colla S, Ascher JS, Arduser M, Cane J, Deyrup M, Droege S, Gibbs J, Griswold T, Hall HG, Henne C, Neff J, Jean RP, Rightmyer MG, Sheffield C, Viet M, Wolf A (2012) Documenting persistence of most Eastern North American bee species (Hymenoptera: Apoidea: Anthophila) to 1990–2009. *Journal of the Kansas Entomological Society* 85(1): 14–22. <https://doi.org/10.2317/JKES110726.1>
- Combs JK (2019) Pollinator habitat framework for coastal meadow conservation. A report prepared for the San Juan Islands National Monument, Cattle Point, San Juan Island, WA
- Crawford JC (1926) North American bees of the genus *Panurginus*. *Proceedings of the Entomological Society of Washington* 28(9): 207–214.
- Daly HV (1973) Bees of the genus *Ceratina* in America north of Mexico (Hymenoptera: Apoidea). *University of California Publications in Entomology* 74: 1–113.
- Danforth BN, Minckley RL, Neff JL (2019) *The Solitary Bees: biology, evolution, conservation*. Princeton University Press, 1–472. <https://doi.org/10.1515/9780691189321>
- Daubenmire R (1970) Steppe vegetation of Washington. *Technical Bulletin. Washington Agricultural Experiment Station* 62: 1–131.
- Decker BL, Bryan C, Kassim L, Soley N, Sipes SD, Arduser M, Harmon-Threatt AN (2020) Preliminary Illinois bee species checklist (Hymenoptera: Apoidea) and use of museum collections. *Journal of the Kansas Entomological Society* 93(1): 34–74. <https://doi.org/10.2317/0022-8567-93.1.34>
- Dibble AC, Drummond FA, Stubbs C, Veit M, Ascher JS (2017) Bees of Maine, with a state species checklist. *Northeastern Naturalist* 24(15): 1–48. <https://doi.org/10.1656/045.024.m1503>
- Donovan BJ (1977) A revision of North American bees of the subgenus *Cnemidandrena*. *University of California Publications in Entomology* 81: 1–107.
- Droege S, Rightmyer MG, Sheffield CS, Brady SG (2010) New synonymies in the bee genus *Nomada* from North America (Hymenoptera: Apidae). *Zootaxa* 2661: 1–32. <https://doi.org/10.11646/zootaxa.2661.1.1>
- Drummond FA, Stubbs CS (1997) Potential for management of the blueberry bee, *Osmia atriventris* Cresson. *Acta Horticulturae* 446: 77–86. <https://doi.org/10.17660/ActaHortic.1997.446.10>
- Fabian MJ (2014) The effects of agricultural practices on native bee community structure and highbush blueberry crop production. PHD Thesis. Western Washington University (Bellingham).
- Franklin JF, Dyrness CT (1973) *Natural Vegetation of Oregon and Washington*. USDA Forest Service General Technical Report PNW-8, 1–417.
- Freitas FV, Branstetter MG, Franceschini-Santos VH, Dorchin A, Wright KW, Lopez-Urbe MM, Griswold T, Silveira FA, Almeida EAB (2023) UCE phylogenomics, biogeography, and classification of long-horned bees (Hymenoptera: Apidae: Eucerini), with insights on using specimens with extremely degraded DNA. *Insect Systematics and Diversity* 7(4): 1–21. <https://doi.org/10.1093/isd/ixad012>

- Gardner J, Gibbs J (2020) The ‘red-tailed’ *Lasioglossum* (*Dialictus*) (Hymenoptera: Halictidae) of the western Nearctic. *European Journal of Taxonomy* 725: 1–242. <https://doi.org/10.5852/ejt.2020.725.1167>
- Gardner J, Gibbs J (2022) New and little-known Canadian *Lasioglossum* (*Dialictus*) (Hymenoptera: Halictidae) and an emended key to species. *The Canadian Entomologist* 154: 1–37. <https://doi.org/10.4039/tce.2021.47>
- Gardner J, Gibbs J (2023) Revision of the Nearctic species of the *Lasioglossum* (*Dialictus*) *gemmatum* species complex (Hymenoptera: Halictidae). *European Journal of Taxonomy* 858: 1–222.
- GBIF.org [06 October] (2022a) GBIF Occurrence Download. <https://doi.org/10.15468/dl.wgwmmz>
- GBIF.org [06 October] (2022b) GBIF Occurrence Download. <https://doi.org/10.15468/dl.2j4s3e>
- Ghisbain G, Lozier JD, Rahman SR, Ezray BD, Tian L, Ulmer JM, Heraghty SD, Strange JP, Rasmont P, Hines HM (2020) Substantial genetic divergence and lack of recent gene flow support cryptic speciation in a colour polymorphic bumble bee (*Bombus bifarius*) species complex. *Systematic Entomology* 45(3): 635–652. <https://doi.org/10.1111/syen.12419>
- Gibbs J (2010) Revision of the metallic species of *Lasioglossum* (*Dialictus*) in Canada (Hymenoptera, Halictidae, Halictini). *Zootaxa* 2591: 1–382. <https://doi.org/10.11646/zootaxa.2591.1.1>
- Gibbs J (2011) Revision of the metallic *Lasioglossum* (*Dialictus*) of eastern North America (Hymenoptera: Halictidae: Halictini). *Zootaxa* 3073: 1–216. <https://doi.org/10.11646/zootaxa.3073.1.1>
- Gibbs J, Ascher JS, Rightmyer MG, Isaacs R (2017) The bees of Michigan (Hymenoptera: Apoidea: Anthophila), with notes on distribution, taxonomy, pollination, and natural history. *Zootaxa* 4352(1): 1–160. <https://doi.org/10.11646/zootaxa.4352.1.1>
- Gibbs J, Packer L, Dumesh S, Danforth BN (2013) Revision and reclassification of *Lasioglossum* (*Evylaeus*), *L.* (*Hemihalictus*) and *L.* (*Sphecodogastra*) in eastern North America (Hymenoptera: Apoidea: Halictidae). *Zootaxa* 3672(1): 1–117. <https://doi.org/10.11646/zootaxa.3672.1.1>
- Gonzalez VH, Griswold TL (2013) Wool carder bees of the genus *Anthidium* in the western hemisphere (Hymenoptera: Megachilidae): diversity, host plant associations, phylogeny, and biogeography. *Zoological Journal of the Linnean Society* 168(2): 221–425. <https://doi.org/10.1111/zoj.12017>
- Grigarick AA, Stange LA (1968) The pollen-collecting bees of the Anthidiini of California (Hymenoptera: Megachilidae). *Bulletin of the California Insect Survey* 9: 1–113.
- Griswold T (1983) Revision of *Proteriades* subgenus *Acrosmia* Michener (Hymenoptera: Megachilidae). *Annals of the Entomological Society of America* 76(4): 707–714. <https://doi.org/10.1093/aesa/76.4.707>
- Hanson T, Sánchez-de León Y, Johnson-Maynard J, Brunsfeld S (2008) Influence of soil and site characteristics on Palouse Prairie plant communities. *Western North American Naturalist* 68: 231–240. [https://doi.org/10.3398/1527-0904\(2008\)68\[231:IOSASC\]2.0.CO;2](https://doi.org/10.3398/1527-0904(2008)68[231:IOSASC]2.0.CO;2)

- Hanson T, Ascher JS (2018) An unusually large nesting aggregations of the digger bee *Anthophora bomboidea* Kirby, 1838 (Hymenoptera: Apidae) in the San Juan Islands, Washington State. *The Pan-Pacific Entomologist* 94(1): 4–16. <https://doi.org/10.3956/2018-94.1.4>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2014a) *Bombus morrisoni*. The IUCN Red List of Threatened Species 2014: e.T44937666A69004519. <https://doi.org/10.2305/IUCN.UK.2014-3.RLTS.T44937666A69004519.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2014b) *Bombus insularis*. The IUCN Red List of Threatened Species 2014: e.T44937688A68984117. <https://doi.org/10.2305/IUCN.UK.2014-3.RLTS.T44937688A68984117.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2014c) *Bombus caliginosus*. The IUCN Red List of Threatened Species 2014: e.T44937726A69000748. <https://doi.org/10.2305/IUCN.UK.2014-3.RLTS.T44937726A69000748.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2014d) *Bombus centralis*. The IUCN Red List of Threatened Species 2014: e.T44937777A69001290. <https://doi.org/10.2305/IUCN.UK.2014-3.RLTS.T44937777A69001290.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2014e) *Bombus frigidus*. The IUCN Red List of Threatened Species 2014: e.T44937790A69002715. <https://doi.org/10.2305/IUCN.UK.2014-3.RLTS.T44937790A69002715.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2014f) *Bombus impatiens*. The IUCN Red List of Threatened Species 2014: e.T44937797A69003246. <https://doi.org/10.2305/IUCN.UK.2014-3.RLTS.T44937797A69003246.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2014g) *Bombus melanopygus*. The IUCN Red List of Threatened Species 2014: e.T44937809A68983638. <https://doi.org/10.2305/IUCN.UK.2014-3.RLTS.T44937809A68983638.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2014h) *Bombus mixtus*. The IUCN Red List of Threatened Species 2014: e.T44937898A69004061. <https://doi.org/10.2305/IUCN.UK.2014-3.RLTS.T44937898A69004061.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2014i) *Bombus ternarius*. The IUCN Red List of Threatened Species 2014: e.T44937988A69005644. <https://doi.org/10.2305/IUCN.UK.2014-3.RLTS.T44937988A69005644.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015a) *Bombus nevadensis*. The IUCN Red List of Threatened Species 2015: e.T21215146A21215273. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T21215146A21215273.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S, Foltz Jordan S (2015b) *Bombus occidentalis*. The IUCN Red List of Threatened Species 2015: e.T44937492A46440201. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937492A46440201.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015c) *Bombus terricola*. The IUCN Red List of Threatened Species 2015: e.T44937505A46440206. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937505A46440206.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015d) *Bombus griseocollis*. The IUCN Red List of Threatened Species 2015: e.T44937645A46440221. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937645A46440221.en>

- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015e) *Bombus rufocinctus*. The IUCN Red List of Threatened Species 2015: e.T21215145A21215305. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T21215145A21215305.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015f) *Bombus suckleyi*. The IUCN Red List of Threatened Species 2015: e.T44937699A46440241. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937699A46440241.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015g) *Bombus flavifrons*. The IUCN Red List of Threatened Species 2015: e.T44937784A46440266. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937784A46440266.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015h) *Bombus huntii*. The IUCN Red List of Threatened Species 2015: e.T21215139A21215245. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T21215139A21215245.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015i) *Bombus sitkensis*. The IUCN Red List of Threatened Species 2015: e.T44937938A46440301. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937938A46440301.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015j) *Bombus sylvicola*. The IUCN Red List of Threatened Species 2015: e.T44937945A46440306. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937945A46440306.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015k) *Bombus vagans*. The IUCN Red List of Threatened Species 2015: e.T44938024A46440316. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44938024A46440316.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015l) *Bombus vandykei*. The IUCN Red List of Threatened Species 2015: e.T44938052A46440321. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44938052A46440321.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015m) *Bombus vosnesenskii*. The IUCN Red List of Threatened Species 2015: e.T44938235A46440326. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44938235A46440326.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015n) *Bombus appositus*. The IUCN Red List of Threatened Species 2015: e.T44938356A46440331. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44938356A46440331.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2015o) *Bombus borealis*. The IUCN Red List of Threatened Species 2015: e.T44938377A46440336. <https://doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44938377A46440336.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S, Foltz Jordan S (2015p) *Bombus fervidus*. The IUCN Red List of Threatened Species 2015: e.T21215132A21215225. <https://doi.org/10.2305/IUCN.UK.2015-4.RLTS.T21215132A21215225.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S, Foltz Jordan S (2015q) *Bombus pensylvanicus*. The IUCN Red List of Threatened Species 2015: e.T21215172A21215281. <https://doi.org/10.2305/IUCN.UK.2015-4.RLTS.T21215172A21215281.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S, Foltz Jordan S (2016a) *Bombus kirbiellus*. The IUCN Red List of Threatened Species 2016: e.T88088737A88291693. <https://doi.org/10.2305/IUCN.UK.2016-1.RLTS.T88088737A88291693.en>

- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S, Foltz Jordan S (2016b) *Bombus polaris*. The IUCN Red List of Threatened Species 2016: e.T88120725A46440181. <https://doi.org/10.2305/IUCN.UK.2016-1.RLTS.T88120725A46440181.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2016c) *Bombus bohemicus*. The IUCN Red List of Threatened Species 2016: e.T13152926A46440141. <https://doi.org/10.2305/IUCN.UK.2016-1.RLTS.T13152926A46440141.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S (2016d) *Bombus flavidus*. The IUCN Red List of Threatened Species 2016: e.T13340361A46440156. <https://doi.org/10.2305/IUCN.UK.2016-1.RLTS.T13340361A46440156.en>
- Hatfield R, Jepsen S, Thorp R, Richardson L, Colla S, Foltz Jordan S (2016e) *Bombus variabilis*. The IUCN Red List of Threatened Species 2016: e.T21215168A21215249. <https://doi.org/10.2305/IUCN.UK.2016-1.RLTS.T21215168A21215249.en>
- Hurd Jr PD, Michener CD (1955) The Megachilinae bees of California (Hymenoptera: Megachilidae). Bulletin of the California Insect Survey 3: 1–248.
- Hurd PD (1979) Superfamily Apoidea. In: Krombein KV, Hurd PD, Smith DR, and Burks BD (Eds) Catalog of Hymenoptera in America North of Mexico. Volume 2. Smithsonian Institution Press. Washington, D. C., 2209 pp.
- IUCN (2001) IUCN Red List Categories and Criteria: Version 3.1. IUCN Species Survival Commission. IUCN, Gland, Switzerland and Cambridge, UK, 1–30.
- Jean RP (2010) Studies of bee diversity in Indiana: the influence of collection methods on species captures, and a state checklist based on museum collection. PHD Thesis. Indiana State University (Terre Haute).
- Kapheim KM, Johnson MM, Jolley M (2021) Composition and acquisition of the microbiome in solitary, ground-nesting alkali bee. Scientific Reports 11: 2993. <https://doi.org/10.1038/s41598-021-82573-x>
- Kilpatrick SK, Gibbs J, Mikulas MM, Spichiger SE, Ostiguy N, Biddinger DJ, Lopez-Urbe MM (2020) An updated checklist of the bees (Hymenoptera, Apoidea, Anthophila) of Pennsylvania, United States of America. Journal of Hymenoptera Research 77: 1–86. <https://doi.org/10.3897/jhr.77.49622>
- Koch JB, Looney C, Sheppard WS, Strange JP (2016) Range extension of two bumble bee species (Hymenoptera: Apidae) into Olympic National Park. Northwest Science 90(2): 228–234. <https://doi.org/10.3955/046.090.0212>
- Koch JB, Looney C, Sheppard WS, Strange JP (2017) Patterns of population genetic structure and diversity across bumble bee communities in the Pacific Northwest. Conservation Genetics 18: 507–520. <https://doi.org/10.1007/s10592-017-0944-8>
- Koch JB, Rodriguez J, Pitts JP, Strange JP (2018) Phylogeny and population genetic analyses reveals cryptic speciation in the *Bombus fervidus* species complex (Hymenoptera: Apidae). PLoS ONE 13(11): e0207080. <https://doi.org/10.1371/journal.pone.0207080>
- LaBerge WE (1956a) A revision of the bees of the genus *Melissodes* in North and Central America. Part I. (Hymenoptera, Apidae). The University of Kansas Science Bulletin 37(18): 911–1194. <https://doi.org/10.5962/bhl.part.24549>

- LaBerge WE (1956b) A revision of the bees of the genus *Melissodes* in North and Central America. Part II (Hymenoptera, Apidae). The University of Kansas Science Bulletin 38(8): 533–578. <https://doi.org/10.5962/p.376392>
- LaBerge WE (1961) A revision of the bees of the genus *Melissodes* in North and Central America. Part III (Hymenoptera, Apidae). The University of Kansas Science Bulletin 42(5): 283–663. <https://doi.org/10.5962/bhl.part.9821>
- LaBerge WE (1969) A revision of the bee genus *Andrena* of the Western Hemisphere. Part II. *Plastandrena*, *Aporandrena*, *Charitandrena*. Transactions of the American Entomological Society 95(1): 1–47.
- LaBerge WE (1973) A revision of the bees of the genus *Andrena* of the Western Hemisphere. Part VI. Subgenus *Trachandrena*. Transactions of the American Entomological Society 99(3): 235–371.
- LaBerge WE (1977) A revision of the bees of the genus *Andrena* of the Western Hemisphere. Part VIII. Subgenera *Thysandrena*, *Dasyandrena*, *Psammandrena*, *Euandrena*, *Oxyandrena*. Transactions of the American Entomological Society 103(1): 1–143.
- LaBerge WE (1980) A revision of the bees of the genus *Andrena* of the Western Hemisphere. Part X. Subgenus *Andrena*. Transactions of the American Entomological Society 106(4): 195–525.
- LaBerge WE (1985) A revision of the bees of the genus *Andrena* of the Western Hemisphere. Part XI. Minor subgenera and subgeneric key. Transactions of the American Entomological Society 111(4): 441–567.
- LaBerge WE (1986a) A revision of the bees of the genus *Andrena* of the Western Hemisphere. Part XII. Subgenera *Leucandrena*, *Ptilandrena*, *Scoliandrena* and *Melandrena*. Transactions of the American Entomological Society 112(3): 191–248.
- LaBerge WE (1986b) The zoogeography of *Andrena* Fabricius (Hymenoptera: Andrenidae) of the Western Hemisphere. In Clambey GK, Pemble RH (Eds) The prairie: past, present, and future: proceedings of the Ninth North American Prairie Conference (Minnesota) July-August 1984. Tri-College University Center for Environmental Studies (Fargo).
- LaBerge WE (1989) A revision of the bees of the genus *Andrena* of the Western Hemisphere. Part XIII. Subgenera *Simandrena* and *Taeniandrena*. Transactions of the American Entomological Society 115(1): 1–56.
- LaBerge WE, Bouseman JK (1970) A revision of the bees of the genus *Andrena* of the Western Hemisphere. Part III. *Tylandrena*. Transactions of the American Entomological Society 96(4): 543–605.
- LaBerge WE, Ribble DW (1972) A revision of the bees of the genus *Andrena* of the Western Hemisphere. Part V. *Gonandrena*, *Geissandrena*, *Parandrena*, *Pelicanandrena*. Transactions of the American Entomological Society 98(3): 271–358.
- LaBerge WE, Ribble DW (1975) A revision of the bees of the genus *Andrena* of the Western Hemisphere. Part VII. Subgenus *Euandrena*. Transactions of the American Entomological Society 101(3): 371–466.
- Lane IG, Portman ZM, Herron-Sweet CH, Pardee GL, Cariveau DP (2022) Differences in bee community composition between restored and remnant prairies are more strongly linked to forb community differences than landscapes differences. Journal of Applied Ecology 59: 129–140. <https://doi.org/10.1111/1365-2664.14035>

- Larkin LL, Neff JL, Simpson BB (2006) Phylogeny of the *Callandrena* subgenus of *Andrena* (Hymenoptera: Andrenidae) based on mitochondrial and nuclear DNA data: polyphyly and convergent evolution. *Molecular Phylogenetics and Evolution* 38: 330–343. <https://doi.org/10.1016/j.ympev.2005.10.003>
- Larkin LL, Neff JL, Simpson BB (2008) The evolution of a pollen diet: host choice and diet breadth of *Andrena* bees (Hymenoptera: Andrenidae). *Apidologie* 39: 133–145. <https://doi.org/10.1051/apido:2007064>
- Lewis SE (1994) Evidence of leaf-cutting bee damage from the Republic sites (Middle Eocene) of Washington. *Journal of Paleontology* 68(1): 172–173. <https://doi.org/10.1017/S0022336000025713>
- Lhomme P, Williams SD, Ghisbain G, Martinet B, Gerard M, Hines HM (2021) Diversification pattern of the widespread holarctic cuckoo bumble bee, *Bombus flavidus* (Hymenoptera: Apidae): the east side story. *Insect Systematics and Diversity* 5(2): 1–15. <https://doi.org/10.1093/isd/ixab007>
- Linsley EG (1939) A revision of the Nearctic Melectinae (Hymenoptera, Anthophoridae). *Annals of the Entomological Society of America* 32(2): 429–468. <https://doi.org/10.1093/aesa/32.2.429>
- Looney C, Eigenbrode SD (2012) Characteristics and distribution of Palouse Prairie remnants: implications for conservation planning. *Natural Areas Journal* 32(1): 75–85. <https://doi.org/10.3375/043.032.0109>
- Looney C, Strange JP, Freeman M, Jennings D (2019) The expanding Pacific Northwest range of *Bombus impatiens* Cresson and its establishment in Washington State. *Biological Invasions* 21: 1879–1885. <https://doi.org/10.1007/s10530-019-01970-6>
- MacPhail VJ, Gibson SD, Hatfield R, Colla SR (2020) Using Bumble Bee Watch to investigate the accuracy and perception of bumble bee (*Bombus* spp.) identification by community scientists. *PeerJ* 8: e9412. <https://doi.org/10.7717/peerj.9412>
- Martinet B, Lecocq T, Brasero N, Gerard M, Urbanova K, Valterova I, Gjershaug JO, Michez D, Rasmont P (2019) Integrative taxonomy of an arctic bumblebee species complex highlights a new cryptic species (Apidae: *Bombus*). *Zoological Journal of the Linnean Society* 187: 599–621. <https://doi.org/10.1093/zoolinlean/zlz041>
- Mathiasson ME, Rehan SM (2019) Status changes in the wild bees of north-eastern North America over 125 years revealed through museum specimens. *Insect Conservation and Diversity* 12: 278–288. <https://doi.org/10.1111/icad.12347>
- Mayer DF, Miliczky ER, Finnigan BF, Johansen CA (2000) The bee fauna (Hymenoptera: Apoidea) of southeastern Washington. *Journal of the Entomological Society of British Columbia* 97: 25–31.
- McGinley RJ (1986) Studies of Halictinae (Apoidea: Halictidae), I: Revision of New World *Lasioglossum* Curtis. *Smithsonian Contributions to Zoology* 429: 1–294. <https://doi.org/10.5479/si.00810282.429>
- McGinley RJ (2003) Studies of Halictinae (Apoidea: Halictidae), II: Revision of *Sphécodogastra* Ashmead, floral specialists of Onagraceae. *Smithsonian Contributions to Zoology* 610: 1–55. <https://doi.org/10.5479/si.00810282.610>
- Michener CD (1935) Some Pacific coast *Panurginus* (Hymen., Apoidea). *The Canadian Entomologist* 67(12): 275–278. <https://doi.org/10.4039/Ent67275-12>

- Michener CD (1936a) Some North American Osmiinae (Hymenoptera, Apoidea). American Museum Novitates 875: 1–30.
- Michener CD (1936b) Western bees of the genus *Ceratina*, subgenus *Zadontomerus*. American Museum Novitates 844: 1–13.
- Michener CD (1938a) American bees of the genus *Heriades*. Annals of the Entomological Society of America 31(4): 514–531. <https://doi.org/10.1093/aesa/31.4.514>
- Michener CD (1938b) American bees of the genus *Chelostoma*. Pan-Pacific Entomologist 14(1): 36–45.
- Michener CD (1938c) A review of the American bees of the genus *Macropis* (Hymen., Apoidea). Psyche 45(2–3): 133–135. <https://doi.org/10.1155/1938/49645>
- Michener CD (1939) A revision of the genus *Ashmeadiella* (Hymen., Megachilidae). American Midland Naturalist 22(1): 1–84. <https://doi.org/10.2307/2420397>
- Michener CD (1947) A revision of the American species of *Hoplitis* (Hymenoptera, Megachilidae). Bulletin of the American Museum of Natural History 89(4): 257–318.
- Michener CD (1979) Biogeography of the bees. Annals of the Missouri Botanical Garden 66(3): 277–347. <https://doi.org/10.2307/2398833>
- Michener CD (2007) The Bees of the World. The John Hopkins University Press (Baltimore), 1–953. <https://doi.org/10.56021/9780801885730>
- Michez D, Patiny S (2005) World revision of the oil-collecting bee genus *Macropis* Panzer 1809 (Hymenoptera: Apoidea: Melittidae) with a description of a new species from Laos. Annales de la Société entomologique de France 41(1): 15–28. <https://doi.org/10.1080/00379271.2005.10697439>
- Miliczky E (2000) Nesting biology of the bee *Melissodes* (*Eumelissodes*) *microsticta* Cockerell in Washington State (Hymenoptera: Apidae). Pan-Pacific Entomologist 76(3): 184–196.
- Miliczky E (2008) Observations on the nesting biology of *Andrena* (*Plastandrena*) *prunorum* Cockerell in Washington State (Hymenoptera: Andrenidae). Journal of the Kansas Entomological Society 81(2): 110–121. <https://doi.org/10.2317/JKES-611.12.1>
- Milliron HE (1973) A monograph of the western hemisphere bumblebees (Hymenoptera: Apidae: Bombinae) II. The genus *Megabombus* subgenus *Megabombus*. Memoirs of the Entomological Society of Canada 89: 81–237. <https://doi.org/10.4039/entm10589fv>
- Mitchell TB (1927) New Megachilid bees. Psyche 34(2): 104–121. <https://doi.org/10.1155/1927/86083>
- Mitchell TB (1933) A revision of the genus *Megachile* in the Nearctic region. Part I. Classification and descriptions of new species (Hymenoptera: Megachilidae). Transactions of the American Entomological Society 59: 295–361.
- Mitchell TB (1935a) A revision of the genus *Megachile* in the Nearctic region. Part III. Taxonomy of subgenera *Anthemois* and *Delomegachile*. Transactions of the American Entomological Society 61(3): 155–205.
- Mitchell TB (1935b) A revision of the genus *Megachile* in the Nearctic region. Part II. Morphology of the male sternites and genital armature and the taxonomy of the subgenera *Litomegachile*, *Neomegachile*, *Neomegachile* and *Cressoniella*. Transactions of the American Entomological Society 61(1): 1–44.

- Mitchell TB (1936a) A revision of the genus *Megachile* in the Nearctic region. Part IV. Taxonomy of the subgenera *Xanthosarus*, *Phaenosarus*, *Megachiloides* and *Derotropis* (Hymenoptera: Megachilidae). Transactions of the American Entomological Society 62(2): 117–166.
- Mitchell TB (1936b) A revision of the genus *Megachile* in the Nearctic region. Part V. Taxonomy of the subgenus *Xeromegachile* (Hymenoptera: Megachilidae). Transactions of the American Entomological Society 62(4): 323–382.
- Mitchell TB (1937a) A revision of the genus *Megachile* in the Nearctic region. Part VI. Taxonomy of subgenera *Argyropile*, *Leptorachis*, *Pseudocentron*, *Acentron* and *Melanosarus*. Transactions of the American Entomological Society 63(1): 45–83.
- Mitchell TB (1937b) A revision of the genus *Megachile* in the Nearctic region. Part VIII. Taxonomy of the subgenus *Chelostomoides*, addenda and index. Transactions of the American Entomological Society 63(4): 381–421.
- Mitchell TB (1937c) A revision of the genus *Megachile* in the Nearctic region. Part VII. Taxonomy of the subgenus *Sayapis*. Transactions of the American Entomological Society 63(2): 175–206.
- Mitchell TB (1938) Notes on the Megachilid subgenera *Xeromegachile* and *Derotropis*. The Pan-Pacific Entomologist 14(4): 168–177.
- Mitchell TB (1942) Notes and descriptions of Nearctic *Megachile* (Hymenoptera, Megachilidae). The Pan-Pacific Entomologist 18(3): 115–118.
- Mitchell TB (1944) New species and records in *Megachile* (Hymenoptera, Megachilidae). The Pan-Pacific Entomologist 20(4): 132–143.
- Mitchell TB (1962) Bees of the eastern United States. Vol. II. North Carolina, Agricultural Experiment Station Technical Bulletin 152, 557 pp.
- Muesebeck CFW, Krombein KV, Townes HK (1951) Hymenoptera of America north of Mexico: synoptic catalog. No. 2. US Department of Agriculture. <https://doi.org/10.5962/bhl.title.65057>
- National Research Council (2007) Status of Pollinators in North America. The National Academies Press (Washington, DC), 1–307.
- NatureServe (2024) NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer. NatureServe (Arlington). <https://explorer.natureserve.org/> [Accessed 6 March 2024]
- Ogilvie JE, Forrest JRK (2017) Interactions between bee foraging and floral resource phenology shape bee populations and communities. Current Opinion in Insect Science 21: 75–82. <https://doi.org/10.1016/j.cois.2017.05.015>
- Onuferko TM (2017) Cleptoparasitic bees of the genus *Epeolus* Latreille (Hymenoptera: Apidae) in Canada. Canadian Journal of Arthropod Identification 30: 1–62.
- Onuferko TM (2018) A revision of the cleptoparasitic bee genus *Epeolus* Latreille for Nearctic species, north of Mexico (Hymenoptera, Apidae). ZooKeys 755: 1–185. <https://doi.org/10.3897/zookeys.755.23939>
- Onuferko TM, Sheffield CS (2022) A new species of *Epeolus* Latreille, 1802 (Hymenoptera: Apidae) from western North America. Insecta Mundi 0940: 1–12.

- Onuferko TM, Packer L, Genaro JA (2021) *Brachymelecta* Linsley, 1939, previously the rarest North American bee genus, was described from an aberrant specimen and is the senior synonym for *Xeromelecta* Linsley, 1939. *European Journal of Taxonomy* 754: 1–51. <https://doi.org/10.5852/ejt.2021.754.1393>
- Orr MC, Pitts JP, Griswold T (2018) Revision of the bee group *Anthophora* (*Micranthophora*) (Hymenoptera: Apidae), with notes on potential conservation concerns and a molecular phylogeny of the genus. *ZooTaxa* 4511(1): 1–193. <https://doi.org/10.11646/zootaxa.4511.1.1>
- Orr MC, Hughes AC, Chesters D, Pickering J, Zhu CD, Ascher JS (2021) Global patterns and drivers of bee distribution. *Current Biology* 31: 451–458. <https://doi.org/10.1016/j.cub.2020.10.053>
- Orr MC, Jakob M, Harmon-Threatt A, Mupepele A-C (2022) A review of global trends in the study types used to investigate bee nesting biology. *Basic and Applied Ecology* 62: 12–21. <https://doi.org/10.1016/j.baae.2022.03.012>
- Owen RE, Whidden TL (2013) Discrimination of the bumble bee species *Bombus occidentalis* Greene and *B. terricola* Kirby by morphometric, colour and RAPD variation. *Zootaxa* 3608: 328–344. <https://doi.org/10.11646/zootaxa.3608.5.2>
- Owens BE, Allain L, Van Gorder EC, Bossart JL, Carlton CE (2018) The bees (Hymenoptera: Apoidea) of Louisiana: an updated, annotated checklist. *Proceedings of the Entomological Society of Washington* 120(2): 272–307. <https://doi.org/10.4289/0013-8797.120.2.272>
- Packer, L (2023) *Bees of the world: a guide to every family*. The Princeton University Press (Princeton), 1–240. <https://doi.org/10.2307/j.ctv2v6pd2p>
- Pisanty G, Richter R, Martin T, Dettman J, Cardinal S (2022) Molecular phylogeny, historical biogeography and revised classification of andrenine bees (Hymenoptera: Andrenidae). *Molecular Phylogenetics and Evolution* 170: 1–16. <https://doi.org/10.1016/j.ympev.2021.107151>
- Portman ZM, Gardner J, Lane IG, Gerjets N, Petersen JD, Ascher JS, Arduser M, Evans EC, Boyd C, Thomson R, Cariveau DP (2023) A checklist of the bees (Hymenoptera: Apoidea) of Minnesota. *ZooTaxa* 5304(1): 1–95. <https://doi.org/10.11646/zootaxa.5304.1.1>
- R Core Team (2023) *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria. <https://www.R-project.org/>
- Ratnasingham S, Hebert PDN (2007) BOLD: The Barcode of Life Data System (www.barcodinglife.org). *Molecular Ecology Notes*. <https://doi.org/10.1111/j.1471-8286.2007.01678.x>
- Raw A (2002) New combinations and synonymies of leafcutter and mason bees of the Americas (*Megachile*, Hymenoptera, Megachilidae). *ZooTaxa* 71: 1–43. <https://doi.org/10.11646/zootaxa.71.1.1>
- Rhoades P, Griswold T, Ikerd H, Waits L, Bosque-Perez NA, Eigenbrode SD (2017) The native bee fauna of the Palouse Prairie (Hymenoptera: Apoidea). *Journal of Melittology* 66: 1–20. <https://doi.org/10.17161/jom.v0i66.5703>
- Rhoades PR, Davis TS, Tinkham WT, Hoffman CM (2018) Effects of seasonality, forest structure, and understory plant richness on bee community assemblage in a southern Rocky Mountain mixed conifer forest. *Annals of the Entomological Society of America* 111(5): 278–284. <https://doi.org/10.1093/aesa/say021>

- Ribble DW (1968) Revisions of two subgenera of *Andrena*: *Micrandrena* Ashmead and *Derandrena* new subgenus (Hymenoptera: Apoidea). Bulletin of the University of Nebraska State Museum 8(5): 237–394.
- Ribble DW (1974) A revision of the bees of the genus *Andrena* of the western hemisphere subgenus *Scaphandrena*. Transactions of the American Entomological Society 100(2): 101–189.
- Rightmyer MG (2008) A review of the cleptoparasitic bee genus *Triepeolus* (Hymenoptera: Apidae). Part I. ZooTaxa 1710: 1–170. <https://doi.org/10.11646/zootaxa.1710.1.1>
- Rightmyer MG, Griswold T, Arduser MS (2010) A review of the non-metallic *Osmia* (Melanosmia) found in North America, with additional notes on palearctic *Melanosmia* (Hymenoptera, Megachilidae). ZooKeys 60: 37–77. <https://doi.org/10.3897/zookeys.60.484>
- Roberts RR (1973) Bees of northwestern America: *Agapostemon*. Oregon State University Agricultural Experiment Station Technical Bulletin 125: 1–23.
- Robinson L, Newell JP, Marzluff JM (2005) Twenty-five years of sprawl in the Seattle region: growth management responses and implications for conservation. Landscape and Urban Planning 71: 51–72. <https://doi.org/10.1016/j.landurbplan.2004.02.005>
- Rodeck HG (1947) *Laminomada*, new subgenus of *Nomada* (Hym.: Apoidea). Annals of the Entomological Society of America 40(2): 266–270. <https://doi.org/10.1093/aesa/40.2.266>
- Rodeck HG (1949) North American bees of the genus *Nomada*, subgenus *Callinomada* (Hymenoptera: Apoidea). Annals of the Entomological Society of America 42: 174–186. <https://doi.org/10.1093/aesa/42.2.174>
- Rowe G (2017) A taxonomic revision of the Canadian non-*Osmia* Osmiini (Hymenoptera: Megachilidae). MS Thesis. York University (Toronto).
- Rozen Jr JG (1958) Monographic study of the genus *Nomadopsis* Ashmead (Hymenoptera: Andrenidae) University of California Publications in Entomology 15: 1–202.
- Rozen Jr JG (1992) Systematics and host relationships of the cuckoo bee genus *Oreopasites* (Hymenoptera: Anthophoridae: Nomadinae). American Museum Novitates 2046: 1–56.
- Sandhouse GA (1939) The North American bees of the genus *Osmia* (Hymenoptera: Apoidea). Memoirs of the Entomological Society of Washington 1: 1–167.
- Scott VL, Ascher JS, Griswold T, Nufio CR (2011) The bees of Colorado (Hymenoptera: Apoidea: Anthophila). Natural History Inventory of Colorado 23: 1–100.
- Shapiro LH, Tepedino VJ, Minckley RL (2014) Bowling for bees: optimal sample number for “bee bowl” sampling transects. Journal of Insect Conservation 18(6): 9. <https://doi.org/10.1007/s10841-014-9720-y>
- Sheffield CS (2020) *Andrena* (*Melandrena*) *cyanura* Cockerell (Hymenoptera: Apoidea, Andrenidae), a valid North American species. Journal of the Entomological Society of British Columbia 117: 49–59.
- Sheffield CS, Heron JM (2018) The bees of British Columbia (Hymenoptera: Apoidea, Apiformes). Journal of the Entomological Society of British Columbia 115: 44–85.
- Sheffield CS, Kevan PG, Pindar A, Packer L (2013a) Bee (Hymenoptera: Apoidea) diversity within apple orchards and old fields in the Annapolis Valley, Nova Scotia, Canada. Canadian Entomologist 145: 94–114. <https://doi.org/10.4039/tce.2012.89>
- Sheffield CS, Pindar A, Packer L, Kevan PG (2013b) The potential of cleptoparasitic bees as indicator taxa for assessing bee communities. Apidologie 44: 501–510. <https://doi.org/10.1007/s13592-013-0200-2>

- Shepherd MD (2005a) Species profile: *Andrena aculeata*. In: Shepherd MD, Vaughan DM, Black SH (Eds) Red list of pollinator insects of North America. CD-ROM Version 1 (May 2005). The Xerces Society for Invertebrate Conservation (Portland).
- Shepherd MD (2005b) Species profile: *Eucera douglasiana*. In: Shepherd MD, Vaughan DM, Black SH (Eds) Red list of pollinator insects of North America. CD-ROM Version 1 (May 2005). The Xerces Society for Invertebrate Conservation (Portland).
- Shepherd MD (2005c) Species profile: *Eucera frater lata*. In: Shepherd MD, Vaughan DM, Black SH (Eds) Red list of pollinator insects of North America. CD-ROM Version 1 (May 2005). The Xerces Society for Invertebrate Conservation (Portland).
- Shepherd MD (2005d) Species profile: *Hoplitis producta subgracilis*. In: Shepherd MD, Vaughan DM, Black SH (Eds) Red list of pollinator insects of North America. CD-ROM Version 1 (May 2005). The Xerces Society for Invertebrate Conservation (Portland).
- Shepherd MD (2005e) Species profile: *Hoplitis orthognathus*. In: Shepherd MD, Vaughan DM, Black SH (Eds) Red list of pollinator insects of North America. CD-ROM Version 1 (May 2005). The Xerces Society for Invertebrate Conservation (Portland).
- Simpson BB, Neff JL (1987) Pollination ecology in the arid southwest. *Aliso: A Journal of Systematic and Floristic Botany* 11(4): 417–440. <https://doi.org/10.5642/aliso.19871104.02>
- Sinha RN, Michener CD (1958) A revision of the genus *Osmia*, subgenus *Centrosmia* (Hymenoptera: Megachilidae). *The University of Kansas Science Bulletin* 39(7): 275–303.
- Snelling RR (1966) Studies on North American bees of the genus *Hylaeus* 1. Distribution of the western species of the subgenus *Prosopis* with descriptions of new forms (Hymenoptera: Colletidae). *Los Angeles County Museum Contributions in Science* 98: 1–18. <https://doi.org/10.5962/p.241088>
- Snelling RR (1970) Studies of North American bees of the genus *Hylaeus*. 5. The subgenera *Hylaeus*, s. str. and *Paraprosopis* (Hymenoptera: Colletidae). *Contributions in Science* 180: 1–59. <https://doi.org/10.5962/p.241167>
- Snelling RR (1994) *Diadasia*, subgenus *Dasiapis*, in North America (Hymenoptera: Anthophoridae). *Contributions in Science* 448: 1–8. <https://doi.org/10.5962/p.226806>
- Stephen WP (1952) A revision of the genus *Colletes* in America north of Mexico (Hymenoptera, Colletidae). PHD Thesis. University of Manitoba (Winnipeg).
- Stephen WP (1954) A revision of the bee genus *Colletes* in America north of Mexico (Hymenoptera, Colletidae). *The University of Kansas Science Bulletin* 36(6): 149–527.
- Strange JP, Tripodi AD (2019) Characterizing bumble bee (*Bombus*) communities in the United States and assessing a conservation monitoring method. *Ecology and Evolution* 9: 1061–1069. <https://doi.org/10.1002/ece3.4783>
- Swenk MH (1908) Specific characters in the bee genus *Colletes*. *The University of Nebraska Contributions from the Department of Entomology* 1: 43–102.
- Swenk MH (1914) I. Studies of North American bees II. Family Stelididae. *University Studies* 14(1): 1–36.
- Taylor NJ (2008) Reproductive biology of *Hackelia venusa* (Piper) St. John (Boraginaceae). MS Thesis. University of Washington (Seattle).
- Tepedino VJ, Griswold TL (1995) The bees of the Columbia Basin. Final Report, USDA Forest Service (Portland), 1–212.

- Thomson JN, Pellmyr O (1992) Mutualism with pollinating seed parasites amid copollinators: constraints on specialization. *Ecology* 73(5): 1780–1791. <https://doi.org/10.2307/1940029>
- Thorp RW (1969) Systematics and ecology of bees of the subgenus *Diandrena* (Hymenoptera: Andrenidae). University of California Publications in Entomology, 1–146.
- Thorp RW, LaBerge WE (2005) A revision of the bees of the genus *Andrena* of the western hemisphere. Part XIV – Subgenus *Onagrandrena* and Part XV – Subgenus *Hesperandrena*. *Illinois Natural History Survey Bulletin* 37(1): 1–64 and 37(2): 65–94. <https://doi.org/10.21900/j.inhs.v37.120>
- Thorp RW, Horning Jr DS, Dunning LL (1983) Bumble bees and cuckoo bumble bees of California. *Bulletin of the California Insect Survey* 23: 1–79.
- Timberlake PH (1943) Bees of the genus *Colletes* chiefly from Colorado. *Bulletin of the American Museum of Natural History* 81(5): 385–410.
- Timberlake PH (1951) Western bees of the genus *Colletes* (Hymenoptera: Apoidea). *The Wassmann Journal of Biology* 9(2): 181–238.
- Timberlake PH (1956) A revisional study of the bees of the genus *Perdita* F. Smith, with special reference to the fauna of the Pacific Coast (Hymenoptera, Apoidea) Part II. University of California Publications in Entomology 11(5): 247–350.
- Timberlake PH (1958) A revisional study of the bees of the genus *Perdita* F. Smith, with special reference to the fauna of the Pacific Coast Part III. University of California Publications in Entomology 14(5): 303–410.
- Timberlake PH (1964) A revisional study of the bees of the genus *Perdita* F. Smith, with special reference to the fauna of the Pacific Coast (Hymenoptera, Apoidea) Part VI. University of California Publications in Entomology 28(2): 125–388.
- Timberlake PH (1968) A revisional study of the bees of the genus *Perdita* F. Smith, with special reference to the fauna of the Pacific Coast. University of California Publications in Entomology 49: 1–196.
- Timberlake PH (1969) A contribution to the systematics of North American species of *Synhalonia* (Hymenoptera, Apoidea). University of California Publications in Entomology 57: 1–76.
- Timberlake PH (1971) Scientific Note – On the identity of *Panurginus ineptus* Cockerell (Hymenoptera: Andrenidae). *The Pan-Pacific Entomologist* 47(2): 148.
- US Environmental Protection Agency (2012) Level III ecoregions of Washington. US EPA Office of Research and Development – National Health and Environmental Effects Research Laboratory, Corvallis, OR.
- Veit MF, Ascher JS, Milam J, Morrison FR, Goldstein PZ (2021) A checklist of the bees of Massachusetts (Hymenoptera: Apoidea: Anthophila). *Journal of the Kansas Entomological Society* 94(2): 81–157. <https://doi.org/10.2317/0022-8567-94.2.81>
- Viereck HL (1916) New species of North American bees of the genus *Andrena* from west of the 100th meridian contained in the collections of the Academy of Natural Sciences of Philadelphia. *Proceedings of the Academy of Natural Sciences of Philadelphia* 68(3): 550–608.
- Viereck HL, Cockerell TDA, Titus ESG, Crawford Jr JC, Swenk MH (1904a) Synopsis of bees of Oregon, Washington, British Columbia and Vancouver. *The Canadian Entomologist* 36(4): 93–100. <https://doi.org/10.4039/Ent3693-4>

- Viereck HL, Cockerell TDA, Titus ESG, Crawford Jr JC, Swenk MH (1904b) Synopsis of bees of Oregon, Washington, British Columbia and Vancouver. II. The Canadian Entomologist 36: 157–161. <https://doi.org/10.4039/Ent36157-6>
- Viereck HL, Cockerell TDA, Titus ESG, Crawford Jr JC, Swenk MH (1904c) Synopsis of bees of Oregon, Washington, British Columbia and Vancouver. III. The Canadian Entomologist 36(8): 189–196, 221–232. <https://doi.org/10.4039/Ent36221-8>
- Viereck HL, Cockerell TDA, Titus ESG, Crawford Jr JC, Swenk MH (1905) Synopsis of bees of Oregon, Washington, British Columbia and Vancouver. IV. The Canadian Entomologist 37(8): 277–287, 313–321. <https://doi.org/10.4039/Ent37313-9>
- Viereck HL, Cockerell TDA, Titus ESG, Crawford Jr JC, Swenk MH (1906) Synopsis of bees of Oregon, Washington, British Columbia and Vancouver. V. The Canadian Entomologist 38(9): 297–304. <https://doi.org/10.4039/Ent38297-9>
- Vinchesi AC (2014) Assessing transportation impacts to alkali bees (Hymenoptera: Halictidae) and alfalfa seed production in the Walla Walla Valley. MS Thesis. Washington State University (Pullman).
- Washington Department of Fish and Wildlife (2015) Washington's State Wildlife Action Plan: 2015 Update. Washington Department of Fish and Wildlife, Olympia, WA, USA.
- Waters S (2023) Data for: Prescribed fire increases plant-pollinator network robustness to losses of rare native forbs. Dryad, Dataset. <https://doi.org/10.1002/eap.2928>
- White JR (1952) A revision of the genus *Osmia*, subgenus *Acanthosioides* (Hymenoptera, Megachilidae). The University of Kansas Science Bulletin 35(2): 219–307.
- Williams PH (1998) An annotated checklist of bumble bees with an analysis of patterns of descriptions (Hymenoptera: Apidae, Bombini). Bulletin of The Natural History Museum (Entomology) 67: 79–152. [*Bombus*: bumblebees of the world] <https://www.nhm.ac.uk/research-curation/research/projects/bombus/>
- Williams PH, Brown MJF, Carolan JC, An J, Goulson D, Aytekin AM, Best LR, Byvaltsev AM, Cederberg B, Dawson R, Huang J, Ito M, Monfared A, Raina RH, Schmid-Hempel P, Sheffield CS, Šima P, Xie Z (2012) Unveiling cryptic species of the bumblebee subgenus *Bombus* s. str. Worldwide with COI barcodes (Hymenoptera: Apidae). Systematics and Biodiversity 10(1): 21–56. <https://doi.org/10.1080/14772000.2012.664574>
- Williams P, Thorp R, Richardson L, Colla S (2014) Bumble Bees of North America. Princeton University Press (Princeton), 1–208.
- Williams PH, Byvaltsev AM, Cederberg B, Berezin MV, Ødegaard F, Rasmussen C, Richardson LL, Huang J, Sheffield CS, Williams ST (2015) Genes suggest ancestral colour polymorphisms are shared across morphologically cryptic species in Arctic bumblebees. PLoS ONE 10(12): 1–26. <https://doi.org/10.1371/journal.pone.0144544>
- Wilson JS, Wilson LE, Loftis LD, Griswold T (2010) The montane bee fauna of north central Washington, USA, with floral associations. Western North American Naturalist 70(2): 198–207. <https://doi.org/10.3398/064.070.0206>
- Winfree R, Bartomeus I, Cariveau DP (2011) Native pollinators in anthropogenic habitats. Annual Review of Ecology, Evolution, and Systematics 42: 1–22. <https://doi.org/10.1146/annurev-ecolsys-102710-145042>

- Wolf AT, Ascher JS (2007) Bees of Wisconsin (Hymenoptera: Apoidea: Anthophila). *The Great Lakes Entomologist* 41(1 & 2): 129–168.
- Zack RS (1984) Catalog of types in the James Entomological Collection. *Melandria* 42: 1–41.
- Zank B, Bagstad KJ, Voigt B, Villa F (2016) Modeling the effects of urban expansion on natural capital stocks and ecosystem service flows: a case study in the Puget Sound, Washington, USA. *Landscape and Urban Planning* 149: 31–42. <https://doi.org/10.1016/j.landurbplan.2016.01.004>

Supplementary material 1

Life history data for each species

Authors: Chanda S. Bartholomew, Elizabeth A. Murray, Silas Bossert, Joel Gardner, Chris Looney

Data type: xlsx

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Link: <https://doi.org/10.3897/jhr.97.129013.suppl1>

Supplementary material 2

Species by ecoregion

Authors: Chanda S. Bartholomew, Elizabeth A. Murray, Silas Bossert, Joel Gardner, Chris Looney

Data type: csv

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